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Benchmarking Best Practices in Transformation for Sea Enterprise

15 September 2006

by

Professor Douglas A. Brook, PhD

Lecturer Lt. Colonel Bryan Hudgens, USAF

with

Nam Nguyen

Katherine Walsh

Prepared for: Naval Sea Systems Command

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Naval Postgraduate School
Monterey, California

Colonel David A. Smarsh   Leonard A. Ferrari, Ph.D.
Acting President   Provost

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The report was prepared by:

_____
Douglas A. Brook, Professor
Graduate School of Business & Public Policy

_____
Lt. Colonel Bryan Hudgens, Lecturer
Graduate School of Business & Public Policy

Reviewed by:

_____
Robert N. Beck
Dean, Graduate School of Business & Public Policy

Released by:

_____
Dan C. Boger
Interim Associate Provost and Dean of Research

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Professor Douglas A. Brook, Ph.D.
Lecturer Lt. Colonel Bryan Hudgens, USAF

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Sea Enterprise is the resource-enabling component of the Navy's Sea Power 21 initiative. In recognition of a future resource-constrained environment, Sea Enterprise seeks to reform the culture and business practices of the Navy so as to generate resources internally that can be applied to reinvestment and recapitalization. Sea Enterprise contracted the Center for Defense Management Reform to research transformation and benchmarking best practices in the private sector. The aim of this research is to help Sea Enterprise understand, design and implement its agenda for organizational change.

This report presents a brief recent history of management reform within the Department of Defense and a summary review of current business management transformation initiatives in the DoD and in the services. Then, a survey of the scholarly and practitioner literature on organizational change explores the questions of first-order and second-order change, and looks at models of incremental, episodic and continuous change. Next, this report examines various types of benchmarking and identifies benchmarking candidates from both private- and public-sector organizations categorized by distinctive best practices that may be applicable to Sea Enterprise.

The report concludes that further in-depth benchmarking by matching Sea Enterprise with specific organizations could contribute to the success of Sea Enterprise. Modeling and benchmarking can help the leaders and managers of Sea Enterprise understand, promote, and advance the success of this important change initiative.

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Key terms: Transformation, defense management, Sea Enterprise

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About the Authors

Douglas A. Brook, PhD

Dr. Brook is Professor of Public Policy and Director of the Center for Defense Management Reform in the Graduate School of Business and Public Policy at the Naval Postgraduate School. In the Administration of President George Herbert Walker Bush, Dr. Brook served as Assistant Secretary of the Army (Financial Management) and as Acting Director of the US Office of Personnel Management. Dr. Brook holds a PhD in Public Policy from George Mason University, and MPA and BA degrees from the University of Michigan.

Lt. Colonel Bryan Hudgens, USAF

Lt Col Hudgens is a Military Lecturer, the Air Force Acquisition Representative, and the Academic Associate (Program Director) for the Master of Executive Management Program in the Graduate School of Business and Public Policy at the Naval Postgraduate School. His scholarly research has appeared in the *Journal of Business Logistics* as well as at academic conferences. Additionally, he has served as a contracting officer in operational, contingency, and major weapon-system environments. He holds both Level III Certification in Contracting through the Acquisition Professional Development Program and an Air Force Senior Acquisition Badge.

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Table of Contents

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Executive Summary

Sea Enterprise is the resource-enabling component of the Navy's Sea Power 21 initiative. In recognition of a future resource-constrained environment, Sea Enterprise seeks to reform the culture and business practices of the Navy so as to generate resources internally that can be applied to reinvestment and recapitalization. Sea Enterprise contracted the Center for Defense Management Reform to research transformation and benchmarking best practices in the private sector. The aim of this research is to help Sea Enterprise understand, design and implement its agenda for organizational change.

This report presents a brief recent history of management reform within the Department of Defense, and a summary review of current business management transformation initiatives in the DoD and in the services. Recent defense business management reform can be traced from the Blue Ribbon Commission (The Packard Commission) under President Reagan through to the present-day Bush Administration. The term "transformation" first arose during President Clinton's second term, although the suggested processes for improvement employed are remarkably similar to those of past (and future) administrations, namely streamlining, managing overhead costs, and adopting best practices from the private sector. Recurring themes throughout the administrations include culture change, efficiency through streamlining, cost reduction, and improved management processes. The DoD and its component services are transforming business practices in response to a changing resource environment. Both the Army and the Air Force have undertaken efforts that are in concert with the DoD's "bread and butter" approach and consistent with the Navy's efficiency/cost-savings focus, in which the dominant form of

transformation is designed to wring efficiencies from the system and allow "cash spin" of the savings to fund additional priorities.

A survey of the scholarly and practitioner literature on organizational change explores the questions of first-order and second-order change, and looks at models of incremental, episodic and continuous change. The literature suggests that few organizations which manage to create persistently successful models of change exist, but those that do share the key traits of adaptability, a commitment to learning and growth, and agility.

Next, this report examines various types of benchmarking and identifies benchmarking candidates from both private- and public-sector organizations categorized by distinctive best practices that may be applicable to Sea Enterprise. Benchmarking is one approach to implementing change initiatives into an organization. Benchmarking involves a process of improvement through studying and implementing existing best practices for improvement. This section provides an overview of benchmarking, an explanation of benchmarking typologies, explores the question of organizational readiness, examines the actual process involved in benchmarking (including examples of benchmarking models), and looks at the future of benchmarking. The report then specifically identifies benchmarking candidates for Sea Enterprise, grouped by category of practice.

Vision	*Internal Communications*
British Airways	Coca Cola
Harley Davidson	Intel
HP	HP
Southwest Airlines	Southwest Airlines
Whirlpool	
Realignment of Enterprise Organization	*Measurement and Evaluation*
FAA	Boston Consulting Group
IBM	US Postal Service
K-Mart	
Process Change	*Cost Management*
GE (Six Sigma)	FAA
Motorola (Six Sigma)	Harley Davidson
Toyota (Lean Manufacturing)	Southwest Airlines
World Bank (Knowledge Mgt)	Whirlpool
	General Motors
	Ford

The report concludes that further in-depth benchmarking by matching Sea Enterprise with specific organizations could contribute to the success of Sea Enterprise. Modeling and benchmarking can help the leaders and managers of Sea Enterprise understand, promote, and advance the success of this important change initiative. Based on this work, it is possible to develop a model of successful transformation, employ that model to evaluate Sea Enterprise

and make recommendations in specific areas (such as in communications where N4 has recently initiated a research engagement), and more closely identify benchmarking partners to determine the potential for applying their "best practices" to Sea Enterprise.

Finally, we recommend that Sea Enterprise consider supporting a research program to address the questions of sustaining its change initiative through leadership transitions and declining base budgets, both of which are conditions that the Navy may face in the near-term future.

I. Introduction

Changing the business operations of defense is necessary to support transformed warfighting capability. Moreover, defense business management reform is needed to deal with fiscal stress caused by internal and external pressures on defense resources. Internal pressures from rising costs for manpower, health care, acquisition, operations and maintenance are constraining discretionary spending inside the defense budget, forcing suboptimal trade-offs in resource allocation decisions. External pressures from the budget deficit, rising costs for Social Security and Medicare, and pressure from other discretionary programs in the Federal budget suggest that total resources allocated for defense will be further constrained in the foreseeable future. Defense spending as a percent of GDP and as a percent of the federal budget has been generally declining for decades—albeit with significant increases in the past few years. Now, there is the possibility that the total amount of current dollars could fall as well, and even more certainty that the rate of growth seen in the most recent years will not be sustained.

Sea Power 21 is a vision of the 21st-century Navy that addresses imperatives for its mission, people and resources. Sea Enterprise is the resource enabler for Sea Power 21, addressing the fiscal, resource and business-management issues associated with the vision. "Sea Enterprise is the Navy's flagship effort for freeing up additional resources to support military transformation initiatives through streamlining naval business processes."[1] The vision of Sea Enterprise is to reduce costs in order to provide internally generated resources for reinvestment and recapitalization. "Sea Enterprise will help us identify, devise, and implement the tools that facilitate appropriate levels of risk in the Navy's business operations, and to undertake the types of reform and restructuring needed to significantly reduce operating costs."[2] Admiral Michael Mullen, Chief of Naval Operations, explains, "Sea Enterprise is about creating fiscal opportunity across the Navy enterprise."[3] Sea

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[1] Naval Transformation Roadmap (2006)

[2] https://ucsobdom02 (2006)

[3] Mullen (2004)

Enterprise seeks to generate and reinvest savings to buy the platforms and systems needed to transform the Navy.

Sea Enterprise has identified three imperatives: (1) change culture, (2) improve processes and structures, and (3) harvest savings. It also seeks to encourage four "desired behaviors": (1) Create a culture of readiness and productivity, (2) create a culture of execution and accountability, (3) challenge every assumption, and (4) promote an enterprise focus. Specifically, Sea Enterprise states that its initiative:

- Aggressively streamlines, integrates, and consolidates Navy organizational structures, while maximizing use of shared services across the enterprise to reduce cost.
- Identifies burdensome overhead costs, divests non-core, underperforming or unnecessary products/services, and production capacity.
- Develops business metrics linked to outputs for principal business areas that will evaluate enterprise efficiency performance.
- Tracks and integrates Echelon II business initiatives, facilitates barrier removal and organizational impediments to change.[4]

Sea Enterprise is guided by a vision—cost reduction to generate re-investable savings. It has also identified organizational changes and behavioral or cultural objectives that support the vision, and it recognizes the role of metrics and tracking as tools to encourage and measure progress. In addition, it has identified priority areas of organizational restructuring and cost management. Some of these were mentioned by former CNO, Admiral Vern Clark, in testimony before the Senate Appropriations Committee.

Sea Enterprise is […] creating ideas that will improve our productivity and reduce our overhead costs. Its key objectives are to:

- Leverage technology to improve performance and minimize manpower costs
- Promote competition and reward innovation and efficiency
- Challenge institutional encumbrances that impede creativity and boldness in innovation
- Aggressively divest non-core, under-performing or unnecessary products, services and production capacity
- Merge redundant efforts

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[4] www.usni.org

- Minimize acquisition and lifecycle costs
- Maximize in-service capital equipment utilization
- Challenge every assumption, cost and requirement.[5]

In the same testimony, Admiral Clark saw evidence of early success. "Department of the Navy senior leadership is actively engaged in tracking the execution of ongoing Sea Enterprise initiatives totaling approximately $40 billion and identifying $12.4 billion in cost savings and requirements mitigation across the Future Years Defense Program (FYDP)."[6]

The Navy's Sea Enterprise advocate is the Deputy Chief of Naval Operations (Material Readiness and Logistics), N4 in the Navy's organizational language. N4 has responsibility for advocating, encouraging, assisting and tracking initiatives that serve the organizational, managerial and financial objectives of Sea Enterprise. N4 has advised CNO and VCNO on transformation proposals and initiatives and briefed flag-level meetings and executive education seminars. Communications programs, including a Navy-wide essay contest, have aimed at promoting Sea Enterprise through all levels of the Navy organization. N4 has produced a Navy Performance Excellence Guidebook (NPEG) to assist commands in their efforts to identify and gain efficiencies. However, Sea Enterprise is not a "program office."

The implementation philosophy of Sea Enterprise is that cost-management initiatives are enterprise-wide responsibilities; wherever cost savings and organizational efficiencies to generate internal capital occur throughout the Navy enterprise, Sea Enterprise exists. And, indeed, major change initiatives like Task Force Lean at Naval Sea Systems Command, AirSpeed (Naval Aviation) and SHIPMAIN (Naval Surface Forces) serve as examples of the diffusion and adoption of Sea Enterprise.

Admiral Mullen has set the cost savings goal. He states that Navy must raise its recapitalization investment over the next five years to $275 billion from a projected $228 billion and observes that this money "almost certainly will not come from increases in the

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[5] US Congress (2005, March 15)

[6] Ibid.

Navy's budget." He points to the most competitive and agile industries in the United States and argues that the industry standard for cost reduction is "generally 5-10 percent. Our goals should be similar."[7] Thus, the CNO suggests that there are lessons to be learned from benchmarking against other organizations to help the Navy succeed with Sea Enterprise. This report is an effort to assist N4 in exploring benchmarking as a means to further the objectives of Sea Enterprise.

Most recently, Sea Enterprise has proposed structural and process changes to advance further the concept of enterprise alignment in the Navy, including creation of a Corporate Business Council and a matrix integration of warfighter enterprises with providers and enabler functions. The vision is for the enterprise to produce an output that is defined as "readiness at cost."

N4 asked the NPS Center for Defense Management Reform to investigate industry transformation efforts to identify best practices and transformational models that can be adopted by Navy's warfare enterprises or replicated enterprise-wide. Thus, we seek to identify and review models of transformation and innovation published in academic and practitioner journals and identify a sample of successful transformation efforts in industry, non-profits, and government. Our goal is to understand what benchmarking is and how it works. Then, we seek to identify organizations with best practices in specific areas of transformation and determine if and how selected best practices can inform business management transformation in the Navy. This should ultimately suggest a roadmap for benchmarking industry best practices in a judicious, cost-effective manner that has a strong potential for being relevant and successful within the Navy context. We focus particularly on the institutionalization of transformation practices and culture and the application of specific strategies and tactics at the leadership level. We do not address specific functional area transformation such as inventory management, acquisition and contracting, or financial reporting.

In the chapters that follow, we first examine briefly the recent history of defense management reform to set the context for the current business management transformation

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[7] Mullen (2004)

agenda. Next, we highlight major themes in organizational change that seem relevant to Sea Enterprise and which help to inform a better understanding of the change process upon which Sea Enterprise has embarked. Chapter IV addresses the questions of what benchmarking is and how benchmarking can be done. Chapter V identifies specific organizations as benchmarking candidates, grouping them by category of best practice and type of benchmarking model. We also examine the transformation agenda of the Air Force to permit inter-service comparison. The concluding chapter suggests an approach for further benchmarking and applied research in support of replicating best practices in Sea Enterprise.

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II. Recent History of Defense Business Management Reform

The following section traces the antecedents in management reform of previous administrations. A look at the recent history provides a context to understand the current state of reform initiatives in the Department of Defense.

Reagan and the Packard Commission

On July 15, 1985, President Ronald Reagan signed *Executive Order 12516*, which proposed the formation of the Blue Ribbon Commission on Defense Management. The Commission principally examined defense management policies and procedures, such as:

- the budget process
- the procurement system
- legislative oversight
- the organizational and operational arrangements, both formal and informal, among the Office of the Secretary of Defense, the Organization of the Joint Chiefs of Staff, the Unified and Specified Command system, the Military Departments, and the Congress.[8]

David Packard chaired the Blue Ribbon Commission, which became known as the Packard Commission. Also serving on the committee was Frank C. Carlucci, who served as Secretary of Defense during the latter part of Reagan's Administration. In an interim report to the President, the Packard Commission identified various "management shortfalls" and stated that "chances for meaningful improvement will come not from more regulation, but only with major institutional change."[9] Secretary of Defense Carlucci and his staff prepared the Defense Management Report for the President based on the defense management reforms identified by the Packard Commission.

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[8] Reagan (1985, July 15)

Bush (41) Administration (1989-1993): "A New Way of Doing Business"

Improvement is an iterative process. True and long lasting improvement also requires changes in culture and philosophy. Long-term success also depends on cooperation from all who are involved with defense, including industry and the Congress. Perhaps most important to the success of reordering defense structures and management practices is the high level priority and focus given the DMR effort.

—DoD Annual Report to the President and Congress, January 1991

Defense management reform during the first Bush Administration stemmed largely from the Defense Management Report (DMR). The themes of "excellence and efficiency" characterized the reform initiatives of this Administration. Different from mere short-term budget reductions, the purpose of these reforms was to save money long-term through streamlined management practices and added efficiency measures. According to Defense Secretary Cheney in his *Annual Report to the President and Congress* in January 1990, the DMR identified the following "requirements" for reform:

- Forge better links among national policy, military strategy, force structure, resources, and programs
- Enhance programmatic and technical input during resource allocation discussions
- Reduce significantly the number of programs that overrun their budgets, are late, or are technically deficient
- Reduce overhead costs while maintaining military strength
- Establish and enforce high ethical standards of conduct in the DoD and the defense industry
- Reduce micromanagement and simplify the laws and regulations governing the DoD
- Reverse the decline in the industrial base
- Improve relations among Congress, DoD, and the defense industry[10]

The need for these reforms was attributed to "competing national priorities" and the decline of financial resources available for national defense.

The goals laid out by the DoD require a long-term strategy, because true solutions for these problems could not come in the form of "'quick fixes' or simple statements of

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[9] Blue Ribbon Commission on Defense Management (1986, February 28)

[10] Cheney (1990, January)

managerial philosophy."[11] To change management culture and accomplish its goals, the DoD turned to the private sector for examples; the Annual Report explained, "the DMR recommended that the Department heed the lessons learned by many large private firms which, when faced with management problems and organizational 'symptoms' comparable to DoD's, were able to overcome their problems and realize dramatic, simultaneous productivity improvements and cost reduction."[12]

The Office of the Secretary of Defense sought to consolidate certain practices and delegate functions that did not need high-level attention to the respective departments. For instance, finance and accounting was centralized in the new Defense Finance and Accounting Service (DFAS) and a consolidated revolving fund, the Defense Business Operating Fund (DBOF), was created. In the services, the Army used its PPBS system to initiate cost-saving changes; the Navy implemented over sixty cost-reducing measures through streamlined management practices; and the Air Force streamlined and "flattened" its organizational structure. At the end of the Bush (41) Administration, Secretary of Defense Cheney felt that these DMR efficiencies would result in savings totaling $70 billion by FY 1997.[13]

Clinton Administration (1993-2001): "Transforming the DoD for the 21st Century"

"Change is difficult. But nowhere is the need for change more obvious then on the business side of defense."

—DoD Annual Report to the President and Congress, 1999

The Clinton Administration had a management reform agenda driven by Vice President Al Gore. The National Performance Review (NPR), later renamed The National Partnership for Reinvention, was created in 1993 to spearhead the effort. The stated "goal is to make the entire federal government less expensive and more efficient, and to change the culture of our national bureaucracy away from complacency and entitlement toward initiative

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[11] Cheney (1990, January)

[12] Ibid.

[13] Ibid.

and empowerment."[14] Characteristics of reinvention included information technology integration, cutting cost, streamlining processes, improving customer service, and experimentation. The DoD created study teams to access weaknesses and provide recommendations on their change implementation strategy.[15]

During Secretary Aspin's short tenure as Secretary of Defense, the Administration focused on cost reduction through the use of dual-technology to support the "two pillars of military capability and economic strength."[16] Once again, the Administration pointed to technological advances in the private sector and the need for the DoD to do the same. During William Perry's term in office, themes of cost reduction and "enhancing defense reform," were continued. The *Annual Reports* during Clinton's first term were organized into the following sections: Personnel, Financial Management Reform, Acquisition Reform, Environmental Security, Infrastructure and Logistics, and Research and Technology. Each respective section lists management-improvement initiatives, cost-reduction successes, and suggestions for future development.[17]

In 1998, the Administration implemented a "new" approach to defense management reform—transformation for the 21st Century—under Secretary of Defense William Cohen. Cohen argued that DoD management practices were far behind those found in the private sector. He wrote:

> DoD has labored under support systems and business practices that are at least a generation out of step with modern corporate America. DoD support systems and practices that were once state-of-the-art are now antiquated compared with the systems and practices in place in the corporate world, while other systems were developed in their own defense-unique culture and have never corresponded with the best business practices of the private sector.[18]

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[14] Clinton (1993, January 3)

[15] Cohen (2001)

[16] Aspin (1994)

[17] Perry (1995)

[18] Cohen (1998)

Although Cohen uses the phrase "best business practices," he does not mention benchmarking these best business practices. However, President Clinton had urged federal agencies to benchmark best practices in the private sector. In *Executive Order 12862*, Clinton urged agencies to "benchmark customer service performance against the best in the industry.[19]

Transformation in the DoD for the 21st Century proposed three main initiatives for change: the Defense Reform Initiative, the Management Reform Memoranda, and the DoD Acquisition Year 2000 goals. First, on November 10, 1997, Cohen announced the Defense Reform Initiative (which he refers to in 1999 as a "strategic blueprint") to make the DoD "leaner and more flexible in order to remain competitive."[20] This plan proposed four major initiatives:

- Reengineer: Adopt modern business practices to achieve world-class standards of performance.
- Consolidate: Streamline organizations to remove redundancy and maximize synergy.
- Compete: Apply market mechanisms to improve quality, reduce costs, and respond to customer needs.
- Eliminate: Reduce excess support structures to free resources and focus on core competencies.[21]

Next, the Management Reform Memoranda proposed 17 reform measures to streamline the infrastructure and "reengineer" business processes, such as acquisition, education, information sharing, transportation, travel, and facilities and property management.[22] Rather than change incrementally, Cohen seemed to argue for big change through reengineering. Nevertheless, the focus of defense management reform was again on efficiency, cost reduction, flexibility, and excellence—starting at the highest level and moving into the departments.

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[19] Clinton (1993, September 11)

[20] Cohen (1998)

[21] Ibid.

[22] Ibid.

George W. Bush Administration (2001-Present): "Better Enterprise for Better Support"

> *"It is not, in the end, about business practices, nor is it the goal to improve figures on the bottom line. It's about the security of the United States of America. And let there be no mistake, it is a matter of life and death. Our job is defending America, and if we cannot change the way we do business then we cannot do our job well, and we must."*

—Secretary Rumsfeld's Remarks September 10, 2001

The George W. Bush Administration also came to office with a management focus. The President's Management Agenda (PMA) addresses five areas targeted for management reform throughout the federal government: human capital, improved financial management, competitive sourcing, electronic government, and budget and performance integration.[23]

DoD's initial management objective was to "increase effectiveness through increased accountability and efficiency"[24] with emphasis on cost reduction, improving quality, reducing redundancies, and adopting best business practices. Although reengineering as a business change method is outdated, some of the language remains behind. The 2002 *Annual Report* calls for realigning, restructuring, streamlining, and focusing on core functions. Additionally, the 2001 *Quadrennial Defense Review* stated that "DoD's business processes and regulations seem to be engineered to prevent any mistake."[25] Change was driven by the newly created Business Practices Implementation Board, an advisory panel consisting of private-sector executives, and other senior-level management reform committees. Later, the Department's Business Management Modernization Program (BMMP) and Defense Business Transformation Agency (DBTA) were created to institutionalize parts of the DoD change program. In addition, the Business Enterprise Architecture (BEA) "is the enterprise architecture for the Department of Defense's business information infrastructure processes, data, standards, business rules, operating requirements, and information exchanges."[26] The BEA seeks to add uniformity to DoD processes to "ensure accurate, reliable, timely and compliant information" and also streamline activities.

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[23] Rumsfeld (2003)

[24] Ibid.

[25] Ibid.

This brief history clearly illustrates that Sea Enterprise is building on a foundation of recent management reform initiatives that targeted many of the same objectives. Constant themes of recent management reforms include: culture change, streamlining processes and organization, and managing overhead and direct costs, all to improve readiness and quality to better support warfighters. Internal and external budget pressures have been the reasons cited for some of these reform agendas; even the term "transformation" has been previously applied.

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[26] Defense Business Transformation (2006)

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III. Business Management Transformation in the DoD, Army and Air Force

This section reviews business transformation in the DoD, the Army, and the Air Force. It identifies both similarities and differences in definitions of, rationales for, philosophies about, and implementation of business transformation among the DoD and the two sister services. Ultimately, this review can serve as a basis for comparing the approaches of the Navy and its sister services in meeting the challenges of transforming business practices.

Transformation: What It Is

The Department of Defense (DoD) defines transformation as "a process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people, and organizations that exploit our nation's advantages and protect against our asymmetric vulnerabilities to sustain our strategic position, which helps underpin peace and stability in the world."[27] In the DoD's view, transformation is a never-ending process of continually anticipating and adapting to the future, with an ultimate goal of sustaining US competitive advantage in warfare.[28]

The DoD's transformation efforts are designed to achieve two related goals: to create "the future of warfare" and to improve its business practices. This second goal, the improvement of business practices, is especially important, because the DoD must create this "future of warfare" within expected resource constraints.[29] Specifically, the DoD's business transformation seeks to improve support to the warfighter while simultaneously ensuring

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[27] Director, Force Transformation (Fall 2003, p. 8)

[28] Ibid.

[29] www.gao.gov (2006, July 31)

financial accountability within the DoD and its component services[30] and among coalition partners.[31]

The Army's definition of transformation is virtually identical to the DoD's. Likewise, the Army's implementation actions support the DoD's definition in terms of using a process, developing new combinations of capabilities and responding to a changing nature of warfare and the joint/combined environment. The Air Force's definition of transformation, while not as verbatim as the Army's, is nonetheless conceptually very similar to the DoD's. Specifically, the Air Force defines transformation as "[a] process by which the military achieves and maintains advantage through changes in operational concepts, organization, and/or technologies that significantly improve its warfighting capabilities or ability to meet the demands of a changing security environment."[32] Interestingly, the Air Force definition can be construed as placing the Air Force's current activities within a stream of transformation that has existed since the dawn of the service; in a sense, the Air Force might argue it has always been "transforming."

Rationale for Transformation

The DoD's transformation agenda is motivated by a turbulent environment that includes new and unpredictable threats. As former Chairman of the Joint Chiefs, General Richard Myers noted, "The transformation of the United States military (today) is to get us ready for what's around the next corner […] [a]nd this is difficult, because we don't know what's around the next corner."[33] While uncertain about the specific threats, the DoD is far more certain that its existing force structure is inadequate to meet them.

Along with creating the "future of warfare," the DoD understands its business management function must also change to keep pace with an evolving environment.[34]

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[30] Department of Defense, Business Transformational Guidance (2006, June 21)

[31] Director, Force Transformation (Fall 2003, p. 8)

[32] US Air Force (2004, p. 8)

[33] Garamone (2005, March 21)

[34] Department of Defense, BTG (2006, June 21)

Simply, the DoD needs more bang from what is all too likely to be limited bucks. To improve its efficiency, the DoD must tackle several significant challenges: too many silos and layers impede efficiency; implicit management beliefs such as "get the money and spend the money" (or "use it or lose it") and "plug and pray" lead to suboptimal weapon acquisitions; and finally, greater integration among the services will be critical in an era of constrained resources.[35]

Along with the DoD generally, both the Army and the Air Force are transforming in response to changing world events. During the Cold War, the Army's plans centered on employing large units with heavy equipment to defeat the Soviet Union, likely on continental Europe. Unfortunately, the fall of the Soviet Union left the Army unprepared. The Army "had a cold war infrastructure, a cold war worldwide footprint for the last 60 years."[36] Similarly, a great debate is raging over the Air Force's role in future combat operations. While many in the Air Force believe that air power alone can defeat or at least stalemate enemy ground forces (e.g., "Rapid Halt" operations), many other analysts maintain that only ground forces can capture and control enemy territory and forces.[37] Changing circumstances have forced each service to transform itself appropriately to the new global environment.

Philosophy of Transformation

The DoD views transformation as an ongoing process without an endpoint or deadline. Secretary of Defense Rumsfeld argues, "the goal is not to transform the entire US military in one year, or even in one decade. That would be both unnecessary and unwise. Transforming the military is not an event; it is an ongoing process. There will be no point at which we can declare that US forces have been 'transformed.'"[38]

Despite the apparent lack of an endstate or a deadline, both the DoD and others have, nonetheless, attempted to categorize transformational efforts in terms of time horizons; these

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[35] www.gao.gov/cghome/dia (2006, July 31)

[36] Peters (2005, September 1)

[37] "Rapid Halt Operations" did not appear as a CONOP in the 2004 AFTFP.

[38] Rumsfeld (2002, May-June); DoD (2003, April)

categorizations offer some helpful insights. Transformation can be classified, for example, as near-term (less than five years), mid-range (ten years) or long-range (potentially 20 years or longer). Shorter-term transformations are more limited and tend to rely on existing technologies, while long-range transformations can effect "radical" changes. Importantly, investments in short- and mid-range transformations can serve as a barrier to long-range transformation by locking up resources that could better be leveraged toward truly strategic needs.[39] Thus, careful trade analysis is critical in allocating fixed resources between shorter-term operational needs, mid-range transformations, and long-term radical transformational efforts.

Along with having a longer (even indefinite) time frame, the DoD also views its transformation as inherently cultural. It seeks to encourage a shift within the DoD (and component services) to an entrepreneurial culture of "creativity and intelligent risk-taking." Secretary Rumsfeld argues the DoD "must promote a more entrepreneurial approach: one that encourages people to be proactive, not reactive, and to behave less like bureaucrats and more like venture capitalists; one that does not wait for threats to emerge and be 'validated' but rather anticipates them before they appear and develops new capabilities to dissuade and deter them.[40]

For several reasons—e.g., the importance of the task, the constrained resources, and the lengthy time-horizon involved—integrating the transformational efforts of the DoD and the services is particularly important. Most transformational efforts will be at the service level; each service manages its own appropriations and acquisitions with its own business practices. Careful management is vital to ensure that transformation at the service level does not suboptimize transformation across the entire DoD.[41]

On the surface, the Army's philosophy of transformation appears similar to that of the DoD and the other services. The Army's stated understanding is that transformation is a

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[39] DoD (2003, April); Binnendijk & Kugler (2001, November)

[40] Rumsfeld (2002, May-June, pp. 20-32)

[41] www.dod.mil/dbt/mission; Cebrowski

continual process; however, their primary goal is a mid-range target of transforming their Cold-war structure to a more modular one by no later than 2014.[42] This focus can be explained, perhaps, in that the Army arguably had the largest reorientation to complete in shifting from the Cold War force structure. On the other hand, the Army does understand the importance of cultural change to successful transformation. The Army wants to increase the speed of innovation in what they believe to be an already existing culture of innovation.[43]

The Army has also recognized the importance of transforming its business activities to better support their operational transformation efforts. They are instilling a culture of continuous process improvement throughout the Army's business environment to increase responsiveness, decrease cycle-time, decrease inventories and provide enhanced support. Army business transformation efforts will reduce human and financial resources that can be directed towards supporting operational requirements.[44]

Similarly to the Army, and in accordance with the DoD, the Air Force also understands transformation to be more philosophical and not tied to a specific deliverable, end-state, or deadline. Interestingly, however, while they appreciate transformation is a philosophical mindset, Air Force leaders note that although they are pleased with the Air Force's progress to date in transforming itself, the Air Force transformation is not yet complete.

Approach to Transformation

The DoD has identified six major, strategic, high-leverage initiatives, called Business Enterprise Priorities (BEPs), which it believes will have the greatest impact on the DoD business arm. These BEPs include achieving better visibility into personnel, acquisitions, materiel, and finances, as well as common supplier engagement and real property

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[42] US Army (2004)

[43] Department of the Army (2005b)

[44] Ibid.

accountability.[45] To achieve these and other transformation goals, the DoD is faced with two major challenges in transformation.

DoD's first challenge is that it must balance near-term and long-range investment risks.[46]   As noted earlier, short-term investment can be the enemy of long-range transformation. On the other hand, long-range investments are not helpful in maintaining current operational superiority. Fortunately, some see a way around the tough decisions over allocating scarce resources between short-term operational and long-term transformation needs, suggesting that the short-term operational requirements might even support longer-term transformational efforts. For example, many fear the long-term effects of the war in Iraq on transformation, especially the risk that the war will rob funding from transformation efforts.   Others, however, mount a counterargument that the war in Iraq is actually accelerating transformation efforts.[47]

The DoD's second challenge is that it must commit funds to specific transformational initiatives while acknowledging that better options might become available. The Department must be willing to cut resources committed to programs—even reasonably-performing transformation initiatives—when better options present themselves.[48]

Given resource constraints and current operations tempos, the DoD accepts that transforming the entire force is, at least initially, not feasible. Continuous improvement is thus the "bread and butter" of transformation—an approach that drives small, consistent improvements in everything the DoD does.[49] Beyond continuous improvement come mid-range commitments and targeted long-range "big bets" designed to effect radical

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[45] www.dod.mil/dbt/priorities

[46] Department of Defense (2003, April)

[47] Morris, 2004, August 4

[48] Department of Defense (2003, April)

[49] Ibid.

transformation.[50] Because it is the "bread and butter" of transformation, both the Army and the Air Force have adopted techniques to drive continuous improvement.

In the Army, Lean Six Sigma is the tool of choice to drive across-the-board elimination of unnecessary or wasteful processes, the reduction of process variability, and the improvement of quality.[51] The Army has set an initial goal to identify at least $2.5 billion from FY2007 onward through improvements in cycle-time reduction and output quality improvement.[52] The Army has committed to extensive training in Lean Six Sigma, including the well-known "belts" system drawn from the martial arts. All program personnel will receive familiarization training, and higher-level "belts," symbolizing greater levels of training and experience, will be required in critical operational and headquarters positions.[53]

Although it is the foundational tool for improvement across the Army, consistent with the DoD's "bread and butter" approach to transformation, Lean Six Sigma is viewed as a supplement to the Army's ongoing efforts to transform its business operations through initiatives such as: Personnel Transformation, Business Management Modernization Program, Portfolio Management of Business Information Systems, Balanced Scorecard, Logistics Transformation and Institutional Army Adaptation.[54] The Army also seeks deeper levels of learning and change. The Center for Army Lessons Learned, for example, gathers operational data and conduct studies that can help direct the efforts towards the Future Force.[55]

The Air Force is also trying to balance near- and longer-term transformational efforts with current operational needs. Air Force leadership argues the Air Force is pursuing transformation programs as aggressively as budgets permit. Current readiness shortfalls make Air Force modernization a tangible and high priority, which, they argue, should not be

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[50] Ibid.

[51] US Army. About continuous process improvement

[52] Secretary of the Army

[53] Department of the Army (2005a)

[54] Secretary of the Army

[55] US Army (2004)

sacrificed for transformation programs with distant and uncertain payoffs. If DoD mandates both goals, Air Force leaders believe greater funding will be needed to achieve both urgent, high-priority modernization and longer-term transformation.[56]

Perhaps convinced that this greater funding might be inconsistent with the realities of projected resource constraints, the Air Force has also adopted tools such as Lean Six Sigma to drive efficiencies. The USAF intends to create new processes through its Smart Ops 21 program, the implementation of which was facilitated by the Air Force's mandate to reduce its force by approximately 40,000 active duty personnel. Smart Ops 21 encompasses the improvement tools of Lean, Six Sigma and Theory of Constraints. To Air Force leaders, Smart Ops 21 is not a program; rather, it is a way of thinking that encourages airmen to question current process and develop more efficient and effective replacements. Ultimately, Air Force leadership wants to use Smart Ops 21 to initiate a cultural change across the Air Force.[57]

Summary

The DoD and its component services are transforming in response to a changing environment and a resource stream expected to continue constrained in the foreseeable future. While both the Army and the Air Force have undertaken efforts that they argue are long-term and radically transformational, especially in response to questions about the relevancy of their Cold War structure to modern combat environments, it appears that both services are acting in concert with the DoD's "bread and butter" approach (and consistently with the Navy's efficiency/cost-savings focus), in which the dominant form of transformation is incremental improvement designed to wring efficiencies from the system and allow "cash spin" of the savings to fund additional priorities.

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[56] Air Force Transformation (2004, June 28)

[57] Lopez (2005)

IV. Managing Organizational Change

Industry faces significant issues in developing transformation strategies. These include many-faceted shareholder and customer demands, globalization, a complex government regulatory structure, the rapid evolution of technology, and persistent pressures to manage costs. Defense management faces many similar challenges. What, then, does the business literature about organizational change say that can help the Navy understand and manage its Sea Enterprise change initiative? This chapter looks at the literature on organizational change to identify (1) relevant themes in models of organizational change and (2) strategies for implementing change.

Literature on organizational change and transformation falls into three major categories: the academic, the quasi-academic, and the prescriptive. Academic works found in scholarly publications, such as *Journal of Management* or the *Academy of Management Review*, tend to be theoretical and focus mainly on modeling external or internal factors of organizational changes. There is little on the prescriptive questions of how an organization can accomplish change, which kinds of change to pursue, and the steps to get there. Quasi-academic publications, such as *Harvard Business Review* and *Sloan Management Journal*, attempt to combine academic approaches with prescriptive advice to managers. The purely prescriptive "guru" literature consists mostly of advice from business leaders or consultants. These tend to be focused on broad principles illustrated with anecdotes from business organizations.

Themes in Models of Organizational Change

At least two categories of general themes are found in the literature, theories that model organizational change. One theme addresses questions of the timing and scope of change; the second deals with types of change.

Timing and Scope

The timing and scope of change initiatives is influenced by issues of urgency and demands of the organization. One approach is to consider first- and second-order changes. First-order change can involve adjustments within the existing structure, or doing more or

less of something. First-order change is reversible, does not involve new learning and is non-transformational. Second-order change requires a new way of seeing things and transformation to something quite different. It requires new learning and is irreversible.[58] Second-order change seems to be what Sea Enterprise is driving toward as it speaks of a new culture, a new way of doing things and a break from past practices.

A key early question is whether change is best done comprehensively or piecemeal. One researcher explains:

> Although theorists of revolutionary change have advocated that all organizational elements, such as strategy, structures, people, systems, and culture, have to be changed simultaneously to achieve maximum organizational alignment and effectiveness, closer field examination done in finer time intervals suggests that the realization of many such changes is fraught with difficulties and typically takes several years. Different contexts may require different assumptions about time.[59]

Implicitly, the assumption often seems to be that most change is going to be incremental and take a long time, especially in the absence of a major crisis. Many government reforms in the past have tended to be piecemeal—for instance, in the reinvention initiative of the 1990s, during which departments were encouraged to experiment with new management strategies; and although experiments were carried out, no comprehensive radical change plans were implemented throughout any departments.[60] Sea Enterprise defines its view of transformation as "deep change […] change that is major in scope, discontinuous with the past and generally irreversible."[61]

A second fundamental issue is whether change should be viewed as episodic or continuous. A basic episodic change model is based on Lewin's concept of "unfreeze—transition—freeze." This change model assumes that organizations will go through distinctive intermittent periods of change. Here, the organization confronts a need to change,

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[58] Golumbiewski, Billingsly & Yeager (1979); Bateson (1979); Berquist (1993)

[59] Huy (2001, October)

[60] Ingraham, Thompson & Sanders (1998)

[61] Quinn (1996)

"unfreezes" in order to position for change, transitions to new mode changing structure, processes, or culture, and then "freezes" to operate in that new mode until and unless some new condition drives another change cycle. The problems with this type of change are apparent. "Episodic change tends to be infrequent, slower because of its wide scope, less complete because it is seldom fully implemented, more strategic in its content, more deliberate and formal than altered, and initiated at higher levels in the organization." Such changes are usually in the face of crisis, involve drastic actions, and have low success rates.[62]

Continuous change, on the other hand, includes improvisation, translation, and learning.[63] Organizations involved in continuous change are those that are built be flexible to change. Continuously changing organizations are in a constant mode of translating their environment, improvising to circumstances, and learning. One continuous change model restates Lewin's episodic model to "freeze, rebalance, unfreeze." The organization "freezes" when something new arises in the environment, rebalances itself to meet the threat or opportunity, and, finally, "unfreezes" by becoming flexible and open to continuous change.

Some change models for large organizations suggest what has come to be known to some as "intrapreneurship."[64] Brown and Eisenhardt describe an organizational model of continuous change utilizing semi-structures—organizations in which some features are prescribed, but other aspects are not—leaving the firm with the ability to do its core task as well as having the flexibility to improvise.[65] Similarly, Tushman and O'Reilly assert that organizations need to become ambidextrous, separating units for exploring new opportunities from those involved in older traditional operations—thus allowing for innovative new independent organizations maintained tightly at the senior management level.[66]

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[62] Weick & Quinn (1999)

[63] Ibid.

[64] Eesley & Longenecker (2006, January/February)

[65] Brown & Eisenhardt (1997, March)

[66] Tushman & O'Reilly (2004, April)

Christensen's suggestion is to create separate units within the company, and to exploit smaller markets, which can be excited with small gains.[67]

Sea Enterprise would seem to be embracing some elements of many of these models. There are elements of comprehensive change suggested by the simultaneous transformation of both the warfighting force and the business management of the Navy. On the other hand, the goal seems to be to create an organization that remains flexible and open to continuous change.

Types of Change

Change initiatives can address various types of change. Two types most relevant to the Sea Enterprise initiative are process change and culture change. Change programs can focus on changing process and structure, cultural change, or both. Beer and Nohria call this "hard" versus "soft" change or "Theory E" and "Theory O" types of change.[68] The "hard" (or Theory E) approach to change usually takes the form of process and structural change—moving people, subtracting or adding offices, changing the architect of the organization. Cultural change involves changing the motivations, attitudes, and the goals of the workers. Huy breaks down these types of changes even further into: commanding, engineering, teaching, and socializing. Commanding and engineering are "hard" types of change; with engineering focusing on internal processes and commanding focused on directing people to change. Teaching and socializing constitute "soft" change: teaching new behavior and attitudes and socializing to creating a new environment. Ultimately, organizations may go through more than one type of change over time, sometimes doing two or more simultaneously.[69]

Sea Enterprise seems to be encouraging both Theory E and Theory O type changes. While there is a major focus on culture change, there are also proposals for structural change

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[67] Christensen (2003)

[68] Beer & Nohria (2000, May/June)

[69] Huy (2001, October)

in the enterprise, and subordinate commands are instituting process changes to achieve efficiencies.

Process and Structural Change. There is more literature on process and structural change than on culture change. In general, process change programs, "share a core focus on measuring, improving, and rationalizing processes […] to increase yield and reduce rework and waste as streamlined processes eliminate non-value added activities."[70] There are numerous process and structure change programs. The following are some current trends.

Less management and more employee empowerment: In 1988, Peter Drucker predicted that in twenty years, large organizations would have less management and resemble the structure of hospitals, symphony orchestras, and universities. "The typical business will be knowledge-based, an organization composed of specialists who direct and discipline their own performance through organized feedback from colleagues, customers, and headquarters."[71] Beer, Eisenstat, and Spector argue that most change programs focus on changing attitudes when the need is really to reshape the roles that people play. They propose that organizations use "task alignment— reorganizing roles, responsibilities, and relationships to solve specific business problem" as the focal point of a change program.[72]

Networks Network reforms aim to create virtual organizations, networked organizations, and partnerships of different parts within a larger entity. "Virtual organizations have been successful at creating flexibility, but the people working in them struggle with loss of proprietary knowledge and control."[73] There have been successes with networks in the federal government, but there have also been problems with employee morale.[74]

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[70] Benner & Tushman (2003)

[71] Drucker (1988, January/February)

[72] Beer, Eisenstat, & Spector (1990, November/December)

[73] Oxman & Smith (2003, Fall)

[74] Ketl (2005, December)

Womack and Jones suggest using lean manufacturing principles on the whole corporation instead of just certain segments, thus creating a "group of individuals, functions," with the mission to "analyze and focus a value stream so that it does everything involved in supplying a good or service to the customer."[75] This is similar to the concepts of both "virtual corporations" and networks, but within one entity. Yet, Kotter warns against interdependence because too much interdependence tends to stifle change. He suggests finding and eliminating unnecessary interdependences.[76]

Teams: Other forms of achieving less management come in term of teams. Cross-organizational teams, for instance, involve different people with different roles working on one product. A more horizontal organization suggests greater organizational democracy. "There is no question that we are in the participative era of management and leadership."[77] These approaches do not mean looser systems of management. Spear and Bowen, when discussing the Toyota Production System, point out that their rigid system gives lower-level employees more responsibility:

> By making people capable and responsible for doing and improving their own work, by standardizing connections with customers and suppliers, and by pushing the resolution of connection and flow problems to the lowest possible level, the rules create an organization with a nest modular structure, rather like the traditional Russian dolls that come one inside the other. The great benefit of nested, modular organizations is that people can implement design changes in one part without unduly affecting another. That's why managers at Toyota can delegate so much responsibility without creating chaos.[78]

Most process improvements work on a particular aspect of the operation rather than on the whole. The trend is toward technological-based systems like enterprise resource planning, supply-chain management, and customer-relationship management. Six Sigma and Lean work on specific outcomes. Hammer argues for "operational innovation," coming up

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[75] Womack & Jones (1994, March/April)

[76] Kotter (1996)

[77] Powley, Fry, Barrett & Bright (2004)

[78] Spear & Bowen (1999, September/October)

with a completely new approach to how a company operates, citing it as the reason for the success of Dell and Toyota.[79]

A different approach, offered by Schaffer and Thompson, asserts that process and structural change should be grounded in results. They critique radical broad-based change. "Result-driven programs, on the other hand, rely on an incremental approach to change, building on what works and discarding what doesn't."[80] Their steps to transformation are doing only what is needed, empirical testing of what works, frequent reinforcement, and continuous learning.

Culture Change. Notwithstanding the strength of process and structural change, some argue that culture should be the focal point for change. Oxman and Smith assert that structural change is outdated, predicting cultural change that incorporates knowledge and performance management systems will replace structural change and reduce the current hierarchical makeup of corporations.[81] Bass and Riggio state that organizational cultures are both the inhibitors and catalysts of change. Placing leadership as the most important component, they argue for creation of an informal, flexible, adaptive, and dynamic, or "transformational," culture.[82]

Other types of cultural change involve customer focus, quality focus, and being more innovation-minded. These are common themes in the prescriptive literature. However, cultural change rarely comes alone. For instance, some change strategies will initiate structural changes to make an organization more customer-focused or quality-focused and, then, mention culture as a tool. Kotter suggests that the only way to change culture is actually by changing structure; that changing people's attitude can only come about by changing their actions.[83]

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[79] Hammer (2004, April)

[80] Schaffer & Thompson (1998)

[81] Oxman & Smith (2003, Fall)

[82] Bass & Riggio (2006)

[83] Kotter (1996)

Appreciative inquiry (AI) can be used to approach cultural change. Rejecting the traditional diagnostic, problem-solving approach, organizations applying AI look at what is, or has been going well, instead of what is going wrong. "AI is typically thought of as a 'soft' strategy used in creating organizational visions, aligning groups, and building cultures."[84] It can also fit into strategy formulation. Typically, AI is composed of four steps: 1) discover: find what is going well; 2) dream: imagine what perfect would be; 3) design: define what would be in the perfect structure, process, etc.; and 4) destiny: creating. There have been positive results with AI.[85]

There are limitations to both hard and soft approaches. Beer and Nohria point out that CEOs focusing solely on "hard" change will "distance themselves from their employees to ease their own pain and guilt." "They fail to invest in building the company's human resources, which inevitably hollows out the company and saps its capacity for sustained performance." On the other hand, focusing solely on "soft" change can prevent CEOs from making tough decisions. Beer and Nohria recommend a balanced approach using both "soft" and "hard" changes.[86] Others call for a simultaneous approach. "Organizational cultures are continuously constructed and reconstructed through interaction and intervention at the everyday level: they are constantly 'in progress' and largely resist central control."[87]

Sea Enterprise is clearly involved in changing—both process/structurally and culturally. Enterprise realignment efforts are addressing process and structure issues. At the same time, Sea Enterprise strives to create a new culture of cost consciousness, enterprise-wide thinking, and continuous improvement.

Strategies for Implementing Change

The development of implementation strategies for change invites the question of whether it is necessary to match the different types of change, as discussed above, with

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[84] Kinni (2003, August)

[85] Sekerka, Brumbaugh, Rosa & Cooperrider (2006)

[86] Beer & Nohria (2000, May/June)

[87] Bate, Khan & Pye (2000 March/April)

different and/or matching forms of implementation. This is a problem area in the literature. Some overriding questions seem to be, "If you have different forms of change, must you utilize implementation strategies that match? Is there a different form of implementation that works better or is more closely aligned with hard or soft change, for example?" A lot of deep change is soft. Organizations may want outcomes associated with processes that are soft but want processes that are all hard. As will be discussed later in this text, Sea Enterprise appears to embrace both hard and soft types of change.

The implementation part of change management is addressed mostly in the prescriptive literature. Quinn, in *Deep Change*, says the seeds of transformation are a vision or new perspective, risk taking, experimentation, and learning from that experimentation, leading ultimately to innovation in thinking and practice. These seeds help create a dynamic organizational system in which transformation results from a number of closely connected operational and management innovations that represent marked departures from traditional principles, programs, and practices. For innovation to take hold and generate long-lasting advantage it must:

- Solve or help solve a big management problem that challenges current thinking and practice
- Challenge an existing belief that is the rationale for current (e.g., routine and habitual) management or operational practices and processes
- Alter and be altered by existing organizational systems (e.g., reward, financial control, work design, etc.) to insure alignment among resources, tasks, technologies, structures, and processes (financial management, measurement, and controls as well as human resources).[88]

Likewise, Roberto has a four-step model for approaching change[89]; Kotter has an eight-step model that has been adopted by Sea Enterprise to guide its change strategy and implementation program.[90]

1. Establish a sense of urgency
2. Create a guiding coalition

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[88] Quinn (1996)

[89] Roberto (2005, Summer)

[90] Kotter (1996)

3. Develop a vision and strategy
4. Communicate the vision
5. Empower broad access
6. Generate short-term wins
7. Consolidate and expand the change effort
8. Anchor new approaches

In addition, Sea Enterprise has also identified a similar set of principles learned from its experience.[91]

- Drive transformation from the top
- Understand your business
- Develop a plan
- Align structures and processes
- Embrace best practices
- Operationalize the plan
- Create a culture of continuous improvement

The need to create a crisis is prevalent in most prescriptive literature.[92] Schein points out that "all forms of learning and change start with some form of dissatisfaction or frustration generated by data that disconfirm our expectations or hopes."[93] Labovitz and Rosansky look at the US military for an analogy: operating in peacetime, complacent and inefficient, but with fast-paced and efficient operations in wartime.[94] Martin, however, offers a word of caution, "People in corporate crisis are in no frame of mind to learn new facts of life, which is just what they need to do."[95]

Leadership qualities are widely addressed in the prescriptive literature, with frequent examples from General Electric and WalMart, among others. But large organizational change rarely results from the leadership traits of a single individual. Instead, some authors stress the necessity of forming teams and building coalitions. Duck calls for a, "Transition Management Team, whose members commit all their time and energy to managing change"

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[91] McCarthy (2006, August 8)

[92] Kotter (1996); Gansler & Lucyshyn (2005, Winter)

[93] Schein (1999, August)

[94] Labovitz & Rosansky (1997)

[95] Martin (1998)

and that can connect the different elements of change efforts.[96]   Key roles are played by both leaders and top-level management[97] and by middle managers.[98] Going deeper in the organization than top-level management can expose differing opinions and contention that can serve to, "jump start the creative process."[99] Change does not always come from the top, but from general managers running peripheral plants and divisions.[100] The role of top management in such cases is to recognize and foster leadership. Sea Enterprise is aiming for an engaged leadership that:

- Understands the true cost of their organizations/activities
- Seeks continual improvement in the effectiveness and efficiency of their business operations
- Delivers cost savings to the Navy.[101]

An articulated mission or *vision* serves as a guiding principle for change. A vision can include both a statement of core ideology, values and purposes but can also portray an envisioned future and a vivid description of that envisioned future.[102] Sea Enterprise has had a clearly articulated vision in the statements issued by CNOs Clark and Mullen. Both have pointed to the mission and core values of the Navy and envisioned a modernized and recapitalized future Navy built in part from internally generated resources. Quinn highlights the importance of good conversations—honest, imaginative, reasonable, inclusive, and issue oriented—in strategic planning.[103]

Developing a strategy can require diagnosing the problem(s) either bounded by limiting the scope[104] or by diagnosing the whole company's operation instead of fragments.[105]

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[96] Duck (1998)

[97] Bass & Riggio (2006); Tushman & O'Reilly (2004, April)

[98] Huy (2001, September)

[99] Goss, Pascale & Athos (1998)

[100] Beer, Eisenstat & Spector (1990, November/December)

[101] McCarthy (2006, August 8)

[102] Collins & Porras (1998)

[103] Quinn (1996, May)

[104] Roberto (2005, Summer)

[105] Goss, Pascale & Athos (1998)

In assessing problems and developing change strategies, organizations sometimes turn to outside consultants or hire new leaders from outside the company or industry. Consultants can give a better perspective on internal constraints. Hiring an outsider CEO may have drawbacks, but it can also stir things up. Gansler and Lucyshyn surveyed thirty government, business, and academic leaders about business transformation in defense. They proposed that the DoD obtain hiring authority to bring in "50 senior managers with necessary background and experience from the private sector" in order to facilitate DoD transformation.[106]

Effective communication supports a change strategy, and organizations need to communicate the goals and vision of the change initiative. There are numerous factors to be addressed in communicating such messages. For example, Garnett suggests a rigorous analysis of four situational factors (Objectives, Audience, Management Situation, and Sender) and two strategy-design factors (Choice of media and Message) must be undertaken in order to communicate effectively.[107] Additionally, many communication researchers highlight the role of persuasive and rhetorical strategies in promoting changes in attitude or behavior, noting that earlier "transmission" models of communication did not sufficiently account for the numerous factors that may affect interpretation and understanding.[108]

Internal challenges to change, whether from employees or other managers, is to be expected and must be confronted. "Most contemporary theories of institutional change are characterized by an explanatory bias toward the status quo as well as by poorly specified mechanisms."[109] One approach is to view change as a *"reframing"* and differentiate between "true" reframing, which involves a change in root understanding, and paying lip service to, or simply "mouthing" a new perspective.[110] While the term "transformation" has permeated the Navy and DoD in recent years, it can be more challenging to determine where true reframing is taking place and where new labels have been simply put onto existing practices.

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[106] Gansler & Lucyshyn (2005, Winter)

[107] Garnett (1992)

[108] See, for example, Conger (1991); Reardon (1991)

[109] Burns & Nielsen (2006, June)

[110] Argyris & Schon (1978)

Sometimes resistance is an indicator of change initiative overload. "Repetitive Change Syndrome" is experienced when organizations too frequently adopt change initiatives generating chaos, burnout, and incapacity to make further change—thus harming daily operations.[111] "The true artistry of change management lies in the various kinds of tactics that change agents employ to create psychological safety."[112] Observers warn against adopting change initiatives too frequently.[113]

One remedy for overcoming resistance is to seek *early small wins*.[114] Small wins can energize employees or keep them excited about the change process. It does the important job of showing that the change is working, especially if supported by effective communications. However, a lack of sustainable results can lead to management losing credibility,[115] detrimental effects to daily operations,[116] and low morale.[117]

It's also vital to note that quick small wins may not result in permanent change; evaluation, feedback and communication are essential to sustaining change. It is likewise critical to judge whether change is actually working. Doing so usually involves a metric system for stated goals (customer feedback, profits, efficiency, etc.).

Collecting information, internally (employee attitudes, efficiency, quality, etc.) and externally (customer feedback, shareholder value) is used to gauge progress. Such data must be comprehensible and relevant to a good change strategy. As an example, the Defense Finance and Accounting Service and the Postal Service have had successes in implement the Balance Scorecard (BSC).[118] BSC can be viewed as both a change program and change

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[111] Abrahamson (2004, Winter)

[112] Schein (1999, August)

[113] Abrahamson (2004, Winter); Roberto (2005, Summer)

[114] Kotter (1996); Christensen (2003)

[115] Roberto (2005, Summer)

[116] Abrahamson (2004, Winter)

[117] Abrahamson (2004, Winter); Oxman & Smith (2003, Fall)

[118] Mathys & Thompson (2006)

sustaining tool. It has been one of the most popular feedback programs, along with Six

Sigma and various quality assessment mechanisms.

Rewardin*g* is another key to maintaining change.[119] This could be praising—awards,

promotions, the belts system of Six Sigma—or monetary inducement. Rewards can

motivate, but they can also foster an unhealthy work environment. "Money can focus and

motivate managers, but it can also hamper teamwork, commitment, and learning." The

solution is to tie incentives to commitment to change.[120]

Continuous learning can support change initiatives and overcome resistance.[121]

Gansler and Lucyshyn's survey report recommended transition to a knowledge-worker

environment, where workers are able to develop, maintain, and use analytic support systems

through further education and training.[122] The literature recognizes that a lot of organizations

cited as successful models of change do not sustain their success. Therefore, to be

continuously successful, organizations need to be adaptive, have employees that are always

learning, and be flexible to change. It now seems that the new goal is to build a flexible,

continuously changing organization.

As a business management change initiative, Sea Enterprise seems to be aimed at

moving to this new type of organization. A new approach to business management in the

Navy is guided by core values and a vision, characterized by a focus on cost management

and a reliance on a changed culture, and organized to support continuous change. A

transformational change process emerges where new value is created—shifting the focus so

that all in the organization value the elements of the new vision and process. Otherwise,

change is not so much transformational as it is incremental within the exiting structure.

Whether or not Sea Enterprise truly represents transformational change can be debated, but

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[119] Kotter (1996); Gansler & Lucyshyn (2005, Winter)

[120] Beer & Nohria (2000, May/June)

[121] Kotter (1996); Martin (1998); Beer & Nohria (2000, May/June); Mathys & Thompson (2006)

[122] Gansler & Lucyshyn (2005, Winter)

even if it represents continuous or incremental change, with both hard and soft elements, it is driving the Navy toward a different way of approaching its business management.

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V. What is Benchmarking?

How should N4 approach its ongoing transformation initiatives? Is one approach appropriate for all transformational initiatives, or should the approach vary based on factors specific to the organization, the environment, or both? These issues can be explored by examining what benchmarking is and how it is done. Studying organizations that have successful transformation initiatives may reveal models for transformation and/or best practices. However, corporate organizational best practices may be embedded in unique cultures and contexts that hinder these practices' transfer to the Navy. Examining public-sector organizations at either the state or federal level (particularly in DoD) may also reveal pockets of innovation whose best practices are relevant to the Navy and, thus, have greater possibility for success.

Organizations employ benchmarking as a management tool for searching out and implementing the best practices in the industry. When conducting preliminary research on whether or not to benchmark, organizations should be aware that there are few references regarding transformational change and/or organizational "agility" in the existing literature, and most literature remains practitioner-based. Additionally, the benchmarking concept is "loosely connected to management theory and is the subject of disagreement between those who embrace it as a tool of performance improvement and good quality practice, and those who regard it as a fad or bandwagon."[123] The following chapter explores: 1) a general overview of benchmarking; 2) benchmarking typologies; 3) organizational readiness; 4) the processes involved in benchmarking; and 5) the future of benchmarking.

An Overview

There are multiple definitions for benchmarking. Despite minor variations, each definition focuses primarily on a *process* of improvement. According to former Xerox executive Michael Spendolini, benchmarking is a "continuous, systematic process for evaluating the products, services, and work processes of organizations recognized as

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[123] Cox, Mann & Samson (1997)

representing best practices for the purpose of organizational improvement."[124] Systems of measurement and improvement that led to the formation of the benchmarking process include competitive analysis and quality function deployment (QFD).[125] Competitive analysis consists of collecting data regarding the markets, sales, products, production costs, etc., of various competitors for the purpose of comparison. Similarly, QFD, which originated within the Japanese Mitsubishi Heavy Industries in the 1970s, worked to improve product development in order to satisfy the expectations and needs of the customer. While both these forms of competitive comparison aimed to improve an organization's output, they failed to examine and, in turn, implement the actual *processes* involved in improvement.[126]

Prior to its application in the business world, surveyors used the term benchmark to compare land elevations. Later, the computer industry used the term "to mean a standard process for measuring the performance capabilities of software and hardware systems from various vendors."[127] The Xerox Corporation is the organization first credited with employing the benchmarking process in accordance with today's standard business definition. The process, described by benchmarking pioneer Robert Camp, was adopted by Xerox in 1979 in order to compete effectively with their Japanese counterpart, Fuji-Xerox. Xerox leaders wanted insight into the manufacturing process employed by Fuji-Xerox, who sold their copiers at a much lower cost. A few years later, Xerox had the insight to look outside the industry for best practices, benchmarking their logistics operation against that of L.L. Bean.[128]

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[124] Spendolini (1992)

[125] Yasin (2002)

[126] Ibid.

[127] Camp (1989)

[128] Ibid.

Benchmarking Typologies

Owing in part to a lack of theoretical framework, there are slight variations in the benchmarking classification schemes in the business literature.[129] However, there are four generic themes that apply to all forms of benchmarking[130]:

1) the value of learning from contexts outside an organization's usual frame of reference
2) the importance of undertaking this learning using a structured, formal approach
3) the comparisons of practices between oneself and the best-in-class on a continuous basis
4) the usefulness of information to drive actions for performance improvement.[131]

Table 1 displays the various classifications of benchmarking found in the literature. The sections highlighted in green represent the most widely-accepted typologies, first introduced by Robert Camp.

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[129] Sarkis (2001)

[130] Fong, Cheng & Ho (1998)

[131] Themes 1 and 2 were adapted by Fong (1998) from Cox et al. (1997)

Table 1. Benchmarking Classifications[132]

Classification	Type	Meaning
Type of Partner	Internal	Comparing best practices within one organization. Ex: Procedures within two Xerox departments
	Competitive	Comparing best practices with direct competitors. Ex: Xerox and Japanese competitor, Fuji-Xerox
	Functional/ Industry	Comparing best practices within same industry, including non-competitors. Ex. Xerox and L.L. Bean
	Generic	Comparing with an organization which extends beyond industry boundaries. Ex. Look to industry to improve business practices within Xerox; shares similarities with functional.
	Global	Comparing with an organization which extends beyond industry boundaries.
Nature of the Object of Study	Process	Used to compare operations, work practices, and business partners.
	Product	Used to compare products and/or services
	Strategic	Used to compare organizational structures, management practices, and business practices. Some similarities to benchmarking.
	Future	A type of benchmarking to be utilized as a forecasting technique in order to identify breakthroughs in the industry, which could eventually serve as benchmarks themselves. A tool for agility measurement.
Purpose of Partnership	Competitive	Goal of comparison is to surpass the best in the industry.
	Collaborative	Goal of comparison is to foster a learning environment that encourages sharing of knowledge.

Organizational Readiness

There are multiple reasons to benchmark. Benchmarking helps organizations set realistic goals, helps them raise their standards of operation to the best in the business, and opens an organization up to continuous improvement.[133] Not surprisingly, benchmarking moved from the private sector into the public sector, and "although the public sector organization typically faces unique operational concerns and a strategic environment that differs from the private sector firm's, public sector organizational goals and objectives are

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[132] Literature Sources of Table: The following classification scheme comes from a variety of sources. The term future benchmarking comes from Sarkis (2001) while the structure of the table, as well as the term global benchmarking, comes from Fong (1998). The classification headings (Type of Partner, Nature of the Object of Study, and Purpose of Partnership) are adaptations of Yamin (2002) and Fong (1998).

[133] Elmuti & Kathawala (1997)

similar to those of the private sector."[134] In fact, there are multiple examples within the public sector of successful benchmarking practices. The US Armed Forces successfully benchmarked their recruiting efforts against those found in the private sector and produced the television spots seen by many today.[135] Moreover, the Government Accountability Office (GAO) continually employs benchmarking to help Federal agencies reduce their costs and/or improve human capital work practices; over one hundred best practice reports are on their website. Finally, the federal government has encouraged benchmarking. On September 11, 1993, Bill Clinton issued *Executive Order 12862* which called for government agencies to "benchmark customer service performance against the best in the industry."[136]

In addition to deciding whether or not to benchmark, organizations should determine their level of organizational readiness. According to former vice president of quality at Alcoa, Tim Carter, there are four phases that organizations involved in benchmarking go through (offered in Table 2 below)[137]:

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[134] Yasin & Dorsch (1998)

[135] Ibid.

[136] Clinton (1993, September 11)

[137] Bemowski (1992)

Table 2. Organizational Readiness

Don't Want, Don't Ask	People are happy with the status quo.
Don't Want, But Ask	People become involved with benchmarking just because it's popular, but they don't listen
Want and Ask	People ask and listen, but are uncomfortable and a bit defensive. Initially, people might be embarrassed to find someone doing something better, so they defend their actions. They might even try to find people who aren't as good as they are because it is gratifying.
Seek, Desire, Listen, and Use	People have matured and are not defensive; they take a progressive stance. They have enough self confidence to seek companies with better processes. They view finding better processes as opportunities for improvement.

Once an organization reaches the fourth phase, it is ready to begin the benchmarking process.

Benchmarking Processes

Organizations often adapt their own version of the benchmarking process to fit their needs. Despite the numerous processes in existence, they all share the following core ideas: planning, analysis, integration, and action.[138]

Planning

Most literature points to the planning stage as critical for successful benchmarking. This stage requires a complete understanding of the reality of the organization and a vision for where it needs to go. An organization must formulate a benchmarking "plan of attack," conduct preliminary research, identify a benchmarking partner(s), research the legal and ethical issues involved with benchmarking, and create a benchmarking team. When immersed in this stage, Robert Camp asks the following of the organization: What is to be benchmarked? To whom or what will we compare? How will the data be collected?[139]

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[138] Camp (1993); these core ideas are, at times, attributed to Edward Deming and the Deming Cycle

[139] Camp (1989)

Analysis

In this phase, the organization gathers and analyzes the respective data. This phase calls for a thorough self-understanding (gathered in the planning stage) in order to fully appreciate and learn from a comparison with the best in class. Although available software does aid in quantitative data collection and interpretation, an organization should also look to the qualitative data to understand the *processes* involved in improvement and the overarching systems at work within the organization.[140] Numerical measures "don't tell you *how* to improve."[141]

Integration

At this point in the benchmarking process, the organization must accept the results of the benchmark findings and carefully plan a method for implementing those best practices that fit the mission of the organization. Conclusions drawn from the analysis phase must be based on substantive data collection (both quantitative and qualitative) and not on the opinions of the organization's leaders.

Action

Integration must translate to action. Those in charge of the respective areas in need of improvement should participate in creating a realistic method of integrating the plan.

Effective communication is essential for success. All levels of management within an organization must understand all aspects of benchmarking and be updated regularly and thoroughly throughout the process. Secondly, benchmarking is *ongoing*, meaning an organization cannot expect to reach "world class" by benchmarking once. There must be room for continual improvement. Organizations should expect to benchmark a few times a decade.[142] Thirdly, *periodic measurement* is necessary to guarantee success.

Although benchmarking helps to reach the level of the "best in class," it does not show an organization how to surpass these standards. Jim Collins talks about the Stockholm

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[140] For a general overview of systems thinking, look to Peter Senge's *The Fifth Discipline*.

[141] Camp (1993)

[142] Camp suggests every three years.

Paradox in his book, *From Good to Great*. The Stockholm Paradox stipulates that organizations must deal in "brutal facts" of reality while simultaneously looking toward the future. Benchmarking helps an organization look to the brutal facts of reality to create a "better tomorrow"[143]; but it does not show an organization how to surpass those standards. Benchmarking remains firmly rooted in the reality of today, even when considering the future. Finally, a "lot of people try to find companies that look very much like their own. There is some risk in that. There is a desire to *copy what you see rather than understand and translate it*. You can copy something without understanding it—but that's a short road to disaster."[144]

The tables below depict various approaches to the benchmarking process: Table 3 lists benchmarking successes and failures[145]; Table 4 the benchmarking model for the Xerox Corporation; and Table 5 the benchmarking model issued by the American Productivity and Quality Center. For more benchmarking models, refer to the available literature citations listed at the end of this document.

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[143] Collins (2001)

[144] Bemowski (1992)

[145] Longbottom (2000)

Table 3. Benchmarking Successes and Failures

Critical Factors	Projects Fail	Projects Succeed
Project Determination	Ad hoc/championing	Clear link to strategic plan
Project Emphasis	Focus on performance measures/ metrics	Focus on measures and methods process
Project Participants	Staff drawn from internal department/function	Cross-function, multi-skill teams, sponsor, facilitator
Organizational Culture	Objectives not clear; lack of trust; low training emphasis; poor communication	Objectives clear; trust; emphasis on training; good communication
Measurement Criteria	Internal focus on cost and performance measures	External focus on adding value to customer

Table 4. Benchmarking Model: Xerox Corporation

PLANNING
1) Identify what is to be benchmarked
2) Identify comparable companies
3) Determine data collection method and collect data

ANALYSIS
4) Determine current performance levels
5) Project future performance levels
6) Communicate benchmark findings and gain acceptance

INTEGRATION
7) Establish functional goals
8) Develop action plans

ACTION
9) Implement specific actions and monitor progress
10) Recalibrate benchmarks

Table 5. Benchmarking Model: American Productivity and Quality Center

PLAN	During this phase the specific study focus area, key measures, and definitions are established and clearly documented. Additionally, the data collection tools are refined and finalized, and research is conducted to identify the best practice organizations to study.
COLLECT	This phase has two distinct objectives: 1) collect qualitative data and 2) learn from the best. The study questionnaire is administered to all participants, and the site visits are conducted at selected best-practice organizations.
ANALYZE	Key activities during this phase include analyzing trends and identifying practices that enable and hinder superior performance. The study team presents a final report containing key findings and insights at a knowledge transfer session. At this concluding meeting of the study, the sponsors discuss the key findings in-depth and have an opportunity to interact with each other and the best-practice organizations through systematic networking activities and presentations. The study team facilitates participants' initial action plan development to adapt and implement what they have learned.
ADAPT	Adaptation and improvement resulting from the best practices identified throughout a consortium study occur after the study participants take the findings back to their organizations.
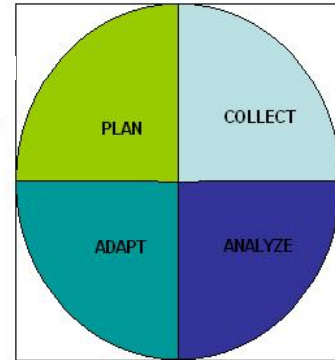
The Future of Benchmarking

As researchers conduct closer examinations of the benchmarking process, new classification schemes have arisen, including future benchmarking.[146] Future benchmarking is "a type of benchmarking to be utilized as a forecasting technique in order to identify breakthroughs in the industry, which could eventually serve as benchmarks themselves; it is a tool for agility measurement."[147] Although current benchmarking practices allow an organization to "catch up" to current industry best practices, it does not show an organization how to surpass those practices.[148] Sarkis argues benchmarking should allow for agility, or a state of being that allows an organization to compete amidst continuous change. Although

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[146] Sarkis (2001)

[147] Ibid.

[148] Camp (1993)

future benchmarking usually refers to agility through technology, Sarkis states, "agility is a 'national vision' concept […] agility can be benchmarked at the industry level and research institution level, to determine how well certain aspects of agility would work in various competitive industries."[149] In other words, future benchmarking, if it reaches its "synergistic potential," promotes benchmarking change models against the best in the industry.

Professors Kim Cameron and David Whetten also believe that benchmarking is the first step in creating readiness for change. They argue that benchmarking, "identifies a target of opportunity. […] The objective is to unfreeze people from reliance on past practice by learning that there may be a better way."[150] When attempting to foster organizational agility, Cameron et al. identify several types of benchmarking standards for comparison:

1) <u>Comparative Standards</u>: Benchmarking current performance practices.
2) <u>Goal Standards</u>: Comparing current performance to publicly stated goals.
3) <u>Improvement Standards</u>: Comparing current performance with improvements made in the past.
4) <u>Ideal Standards</u>: Comparing current performance with an idea or perfect standard.
5) <u>Stakeholder Expectations</u>: Comparing current performance with the expectations of customers, employees, or other stakeholders.[151]

The standards above deviate from the traditional uses of benchmarking; however, these standards do create opportunities for culture change within an organization and may carve a new direction for the future of benchmarking processes.

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[149] Sarkis (2001)

[150] Cameron & Whetten (2006)

[151] Ibid.

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VI. Benchmarking Candidates for Sea Enterprise

The preceding chapters lead to the identification of possible benchmarking candidates for Sea Enterprise. The following is an annotated selection of benchmarking candidates, with a chart (Table 6 in Appendix A) denoting the types of benchmarking suggested for each candidate, the particular aspect of change management that stands out for each candidate, and the relevant literature to consult for more information on each candidate.

American Auto Industry: General Motors and Ford

Giants in Transition:

Ford and GM are two automakers with similar crises. Although Ford is in much better shape (they made a profit last year, whereas GM lost $10 billion), both companies are facing decreasing market share and costs that far exceed their main foreign competitor, Toyota. In the face of disaster, both companies have recently instituted change programs.

The similarities between these two programs are striking. In 2002, Ford implemented a 3-point program:

1. Redouble efforts to stem US retail share loss
2. Trim excess manufacturing capacity
3. Rejuvenate products with expressive styling and disciplined scheduling.
   In 2005, GM North America came out with a 4-point plan for turnaround:
1. Product Excellence
2. Revitalize sales and marketing strategy
3. Accelerate cost reductions and quality improvement
4. Address health-care burden
   Other than GM specifically mentioning their health-care burden (which Ford also

seeks to reduce), the two programs appear identical. Both companies also carried out structural reduction, including plant closures and layoffs. The companies were also negotiating with the union in order to reduce benefits to lower company costs. Additionally, there were no drastic changes in Ford's product design between 2002 and 2006; excess capacity was trimmed, but far short of the changes suggested in its goals. Market share did not improve, partly because of the unexpected drop in SUV sales. Even in the traditional strong truck and SUV market, Ford and GM were losing ground to foreign carmakers.

The Problem:

The underlying problem at Ford and GM seems to be three-fold.

1) Structural Concerns: Both GM and Ford have excess capacity. There is a lot of waste in both capital equipment and labor, which both address through lay-offs and sell-offs.

2) Lack of Innovation: Both companies were not built either structurally or culturally to innovate. Four years ago, Ford articulated a desire to design cars with expressive styling. In addition, the documentary "Who Killed the Electric Car?" showed that a decade ago GM had a technology that could possibly revolutionize the industry and make it into a market leader in energy-efficient cars. Instead, GM scrapped the project despite promising numbers. Now, it is trying to catch up with Japanese carmakers in a segment it should have dominated. Both examples demonstrate that Ford and GM have problem coming up with, accepting, and implementing new ideas.

3) Poor Environment Conditions: Ford and GM do not have the same reputation for quality among consumers as Toyota. Also, the labor situation weighs down both companies. Pension and health care costs for Ford are almost four times higher per car than at Toyota (and GM shows costs 8 times higher!). Larry Bossidy, former Honeywell International CEO and respected business guru, said the situation makes it impossible to succeed, and the only solution might be government intervention to pick up pension and health care costs.

Conclusion:

Whether Ford and/or GM can turn around is yet to be seen. Both companies face huge obstacles, internally and externally. But their need for cost management, cost reduction and restructuring could be analogous to the situation facing the Navy and the DoD.[152]

British Airways (BA)

British Airways faced a huge financial crisis in the 1980s, which forced the company to privatize. BA changed their slogan to "Putting People First" and implemented a new employee training program, essentially transitioning into a customer-focused airline company. In doing so, BA garnered growth and respect in the industry. Throughout the years, BA worked diligently to reinforce this mission to their employees, especially when the company cut functions to save money, which created loss of morale and a drop in customer

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[152] See Bossidy (2004); General Motors (2006); Wilson (2005); www.ford.com; www.gm.com

service quality. Today, BA strives to reduce costs while simultaneously maintaining customer service quality, despite current airline trends that cut costs at the expense of their customer service programs.[153]

Boston Consulting Group (BCG)

DICE:

The Boston Consulting Group developed DICE to analyze change efforts in organizations. DICE remains one of the few evaluation programs based on change alone. DICE has four components:

1) **D**uration: Involves scheduling a milestone to review the execution of projects, identify gaps, and detect new risks.

2) **I**ntegrity: Assesses how much a company can rely on team managers, supervisors, and staff to execute change.

3) **C**ommitment: Measures top-level commitment, as well the local area undergoing the change.

4) **E**ffort: Recognizes that additional work is necessary. Companies frequently do not realize that, with change programs, employees have to do additional work on top of their preexisting duties. Assessing how much workload is added, ideally no more than 10% per employee, is crucial.

BCG measures each component on a 7 (best) to 28 (worst) scale. A continuous measurement process used during a change effort, DICE increases effectiveness and identifies problem areas.[154]

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[153] See Jick & Peiperl (2003); www.britishairways.com

[154] See Sirkin, Keenan & Jackson (2005, October); Wahid, Jackson & Sirkin (2004, September 15)

Business to Employee (B2E):

Coca Cola created one of the most advanced online marketplaces for its employees. Online marketplaces are websites or networks that allow people to acquire goods and services through the internet. It serves as a great tool for selling products to customers, as evidenced by the success of Amazon and Dell. Most large corporations have created similar websites to sell their own products.

This new trend promotes improving efficiency and morale. These marketplaces service: 1) partnership between companies (B2C), and 2) employees within a company (B2E). Coca Cola's new CEO, E. Neville Isdell, entered the company promoting the philosophy that "skilled and motivated employees are the key to realizing strategic goals." Online marketplaces act as a communication tool to spread the goals and mission of the company to employees, while simultaneously streamlining internal processes, such as human resources. Coca Cola implemented an extensive B2E program, which it employs to communicate with and provide services, such as benefits online, to its employees.

Other companies that have recently built a B2E system include: Delta, Charles Schwab, and Cisco.[155]

Federal Aviation Administration (FAA)

The FAA was once on the GAO's high-risk list. The new CFO was challenged to:

1) Improve financial data
2) Improve financial controls
3) Improve cost efficiency
   In order to complete the above, the FAA's new CFO turned to value management to find excellence in financial management. FAA:

1) Built checks and balances into procurement
2) Set tough performance goals and frequently measured progress
3) Meticulously accounted for even the smallest expenditures
4) Cut costs whenever possible (particularly through consolidation practices)
5) Outsourced flight service station(s)
6) Standardized IT equipment, servers, and processes
7) Centralized many web pages under its public affairs organization
8) Centralized oversight of realty
9) Forced every department in the agency to come up with creative ways to save
10) Switched to Delphi's financial management system
11) Created a committee of senior executives (Joint Resource Council) to review every major project

What do others think? Remesh Punwani, FAA CFO explained, "Our auditors told us that working with the FAA is like a dream compared to some of the other federal agencies: 'We think that you guys are more progressive and proactive than any other federal agency that we've worked with.'" But the pace of change within the FAA is glacial. Punwani suggests, "The challenge is not just to come up with new systems but to demonstrate to people that new systems, new processes, are good for you and for the agency, and that takes time."[156]

General Electric

"The Quality Company":

Six Sigma: Although Motorola is the company first credited with employing Six Sigma, GE, under the charismatic leadership of Jack Welch, made the management program mainstream. Even in retirement, Welch still touts the merit of Six Sigma, which continues to be an essential component of the GE management process.

Six Sigma is a statistical mean of improving quality, and, "according to General Electric (GE)—an early adopter of the program—Six Sigma is a 'disciplined methodology of defining, measuring, analyzing, improving and controlling the quality in every one of the

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[155] See Hansen & Deimler (2001, Fall); Karamally (2004, July); www.coca-cola.com

[156] See Dickey (2006, July 15); GAO (2004, November 12); www.faa.gov

company's products, processes and transactions—with the ultimate goal of virtually eliminating all defects.'" Since implementing the program, leaders in management realized that more than process and methodology, change is needed. GE pushed internal campaigns to achieve "buy-in," and created a very popular leadership training program, which revolves around the Six Sigma management philosophy.

Notable traits of the GE culture include a highly competitive spirit, characterized by a stated goal of being first or second in their field, and an open communication network, characterized by the open circulation of company information.   However, one of the problems with benchmarking GE is that much of the success remains credited to the leadership of Jack Welch. Moreover, critics of Six Sigma argue that the process remains too inward looking, internally competitive, and big, all of which contribute to failure.[157]

Harley-Davidson

In the 1960s, American Machine and Foundry (AMF) acquired Harley-Davidson. They sought to reduce costs during a time of economic downturn and competition from Japan. Unfortunately, they ignored Harley-Davidson's commitment to quality and created motorcycles rampant with mechanical defects. In 1981, Jeff Bluestein and twelve other Harley-Davidson executives bought the company from AMF. Despite struggles throughout the 80s and early 90s, Harley-Davidson currently maintains a competitive advantage and remains committed to selling quality products while reducing costs.

Cost-reducing Methods:

1) <u>Supplier Network</u>: Vice President of Materials and Product Cost, Garry Berryman, identified problem areas within Harley's supply base. He created a purchasing engineer position and sought to create a much closer relationship with suppliers. The new Product Development Center brought product development engineers and suppliers under one roof. Maintenance, Repair and Operating (MRO) contracts were examined and consolidated. Not surprisingly, costs plummeted.

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[157] See Henderson & Evans (2000); Morris (2006, July 11); Ramberg (2000, May)

2) Quality Control: Berryman also created the Supplier Advisory Council. The council helped create a Master Supplier Agreement focused on reducing costs, improving quality, and reducing time spent developing new products. Harley demanded specific quality levels from its suppliers. In order to facilitate the demands required by the master agreement, Harley offered its own engineers and staff for assistance. Quality levels rapidly improved.

3) The Harley Triangle: When Garry Berryman arrived in 1995, he knew that product quality and supplier relationships were not the only cornerstones that Harley-Davidson needed to develop. Developing an efficient means to transport products and communicate with suppliers was also critical. The Harley Triangle, a network of factories, outsourced and internal transportation, and Just-in-time techniques, is the result.

4) Core Competencies: Today, Harley prides itself on its quality and supply efficiency. Areas that were weaknesses a decade ago are now company strong suits. Accordingly, Purchasing Magazine awarded Harley Davidson its Gold Medal of Excellence for outstanding performance in 2000.

5) Competitive Advantage: The improvements Harley Davidson made in supply, transportation, and quality allowed it to exploit one of its most significant competitive advantages: an almost cult-like following amongst US motorcyclists. This strong brand name differentiates it from its competitors and gives Harley a strong advantage in the heavy weight motorcycle market.[158]

Hewlett-Packard

> *"It is necessary that people work together in unison toward common objectives and avoid working at cross purposes at all levels if the ultimate in efficiency and achievement is to be obtained."*
> - David Packard

HP's Corporate Objectives have guided the company in the conduct of its business since 1957, when first written by co-founders Bill Hewlett and Dave Packard. Hewlett and Packard successfully promoted a different kind of work environment and became one of the first companies to offer its employees stock options. Each corporate objective carries an explicitly-stated associated underlying belief.

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[158] See Baker, Keeler, Shipp, Sinram & Schultz (2005); Beaver & Bronson (2004); Fililczak (1996, February); Handfield, Monczka & Robert (2005); Hamel & Prahalad (1990); Hannon (2003, July 17); Milligan (2000, September 21); Porter (1985); Sullivan (2004); Will (2002, July 22); http://www.harley-davidson.com/wcm/Content/Pages/home.jsp? locale=en_US

HP's Corporate Objectives are as follows:

1) Customer Loyalty
2) Profit
3) Market Leadership
4) Growth
5) Employee Commitment
6) Leadership Capability
7) Global Citizenship

When an "outsider" CEO, Carly Fiorina proposed a merger of HP and Compaq, significant resistance emerged centered around perceived fears that HP's corporate culture would change.

Supply-chain Management:

In 2003, HP introduced its new Supplier Code of Conduct to their top 50 suppliers, and now that number has grown to 450. The Supply Chain Social Environmental Responsibility program is comprised of five key elements:

- A clearly defined policy, vision and direction, supported by senior management
- Ongoing development and distribution of HP policies and standards
- Conformity assessment and monitoring
- Corrective action planning based on continuous improvement
  Internal and external reporting.[159]

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[159] See Prior-Smith & Perrin (2006); http://www.hp.com

Figure 1. Aspects of Supply Chain and Global Citizenship at HP
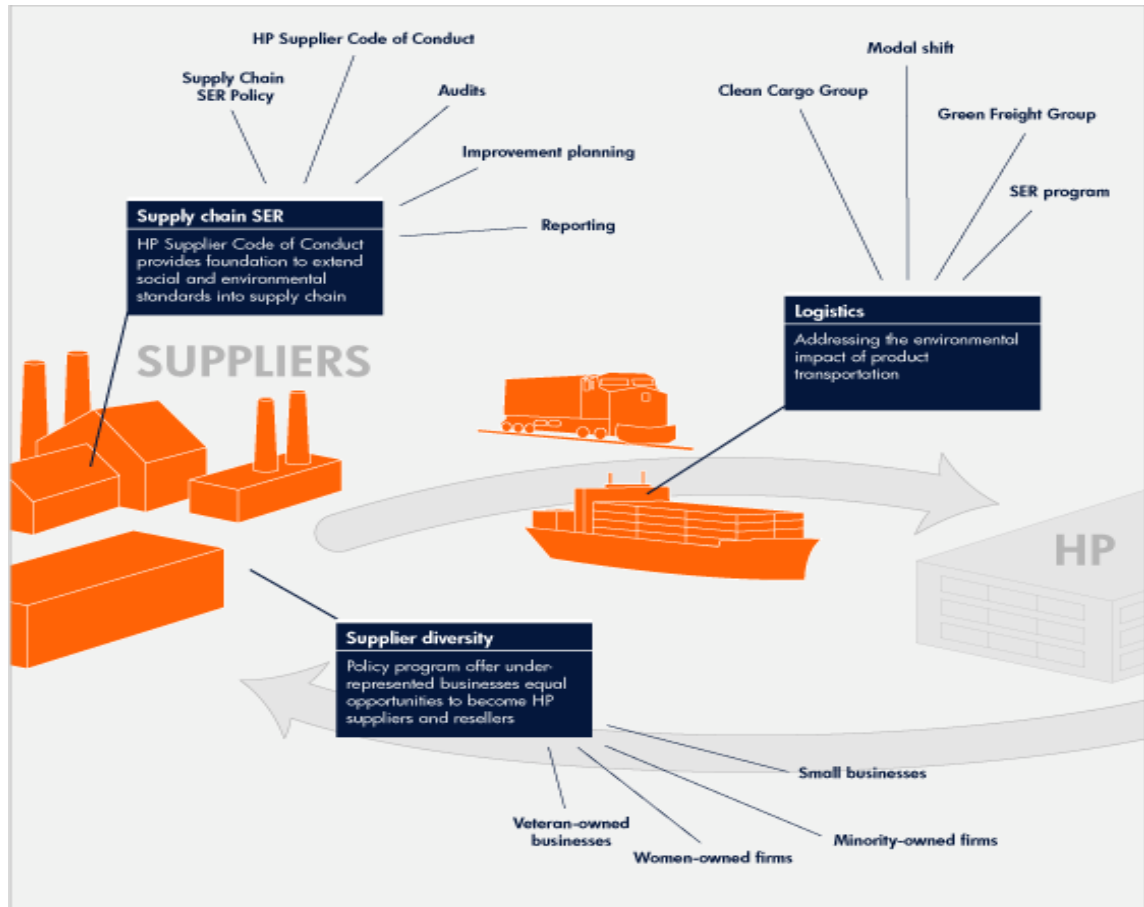
International Business Machines (IBM)

"Would you like me to give you a formula for... success? It's quite simple, really. Double your rate of failure. You're thinking of failure as the enemy of success. But it isn't at all... you can be discouraged by failure, or you can learn from it. So go ahead and make mistakes. Make all you can. Because, remember that's where you'll find success. On the far side." —
Thomas J. Watson

In 1993, Lou Gerstner was hired to break apart IBM. After a thorough investigation, he felt that the company could be profitable once again. The focus at IBM changed to one of "knowledge and solution service." They are now about "e-business on demand."

To ensure the success of the company, IBM streamlined the company and laid-off workers. Lou Gerstner wanted "One IBM."

Structural Changes:

IBM made the following changes to optimize structural efficiency:

1) Shifted 100 data centers into 3 large centers powered by server farms
2) Leadership roles changed
3) Lay-offs
4) Restructured its 128 CIOs into one position
5) Created a new division to be the central focus of the company, IBM Global Services (IGS)
6) Outsourced non-value added functions

On-demand Service:

The company strives to focus on Customer Service with the aid of six guiding principles:

1. Measuring success in customer satisfaction and creation of shareholder value
2. Building competitive advantage in productivity, efficiency, cost, quality, responsiveness and cash management
3. Delivering a "superior end-to-end customer experience"
4. Executing with speed and urgency through simplified processes
5. Demonstrating IBM's leadership in "e-business on demand" while being recognized as the industry's supply-chain leader
6. Developing employee skills under the auspices of an integrated team.

Cost Management:

IBM also:

1) Outsourced functions where it did not have a competitive advantage
2) Increased reliance on internet (automated procurement)
3) Took savings and focused them on the customer.[160]

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[160] See Applegate (2006, January); Capo, Steele, Thompson & Whiting (2006); Garr (2000); Radjou (2005, March 24); http://www.ibm.com/us

Vision:

> "Intel. Leap ahead.™ An idea, a mantra, a call to action. Leap ahead declares who we are and where we are going. These two words capture what drives us, inspires us, galvanizes us into action, and unites us in purpose and practice. It is the simple embodiment of what we make possible for people every where." In order to "leap ahead," Intel must promote external interdependencies and deal effectively with internal tensions.

External Interdependencies:

1) Foster external innovation
2) "Boundary-setting" activities
3) Coordinate innovation across firms

Internal Tensions:

Intel acknowledges these tensions and feels they are a necessary component of platform leadership. One employee states, "Intel does not expect these tensions to be 'solved' as soon as they emerge, however; rather, the firm has management processes that encourage formalized internal debate on the issues underlying these tensions, where dissenting views can be expressed. This debate takes place under the clear authority of a judging party comprising the executive staff of Andy Grove, Gordon Moore, and Craig Barrett."

Intel has formal mechanisms in place to deal with problems:

1) Process of Strategic Long Range Planning (SLRP) meetings twice a year. "It's a very intense, fairly confrontational process"
2) Product Line Business Plan (PLBP) meetings; more specific then SLRP meetings
3) Intel Objectives: Put colorful posters on every wall, in every cubicle, in every meeting room.

Andy Groves[161] asserts that Intel's culture permits open confrontation, and that is important to allow "strategic dissonance"—defined as the divergence between actions and statements.

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[161] Groves (1996)

Another critical aspect of Intel is their belief that critical to socialization of new employees is a "tolerance for ambiguity."[162]

K-Mart

Facing Failure:

In the 1950s, K-Mart was the company that caught Woolworth, Kresge, and Dayton Hudson unprepared for the new discount retail market. Unfortunately, during the early 1990s, K-Mart, once the top discount retailer in the industry, fell to third within five years (due in large part to disorganization and bad strategy).

Force to Change:

Facing eminent extinction, K-Mart reorganized to stay alive. Drastic changes were made. The company realigned itself to focus more on the customer. New executives were hired and put on a performance-based reward system, specifically performance of their customer service program.

The company also had to scale back. Separate (and recently acquired) businesses in books, office supplies, and other industries were sold off, and stores across the country closed. K-Mart reorganized those stores still open to carry more products, such as food, to meet customer demand. Although in the short term, Kmart cannot reclaim its number-one position from WalMart or Target, it did survive; something that, in 1995, many analysts did not predict.[163]

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[162] See Gawer (2000, February); http://www.intel.com/intel/index.htm?iid= HMPAGE+Header_1_About

[163] See Christensen (2003); Labovitz & Rosansky (1997); Lilo (2000, July 7); http://www.kmart.com

Motorola

## The Originator and Model Company for Six Sigma:

Motorola is often credited for creating Six Sigma in the 1980s. Since winning the Malcolm Balbridge Award in 1988, Motorola has led the popularization of Six Sigma into the leading management technique today. It is one of two, the other being GE, that are cited as the best benchmarks for the program.

Motorola continually sets goals to reduce the rate of defects to a fraction of a percentage point. These goals are criticized by some as arbitrary and a public relations move. Despite criticism, management at Motorola implemented a karate-influenced, image-laden leadership training program where managers receive belts of different color and rank based on how well they apply the Six Sigma process to their work. Although it sounds superficial, the training program does form rigidity within the system and makes communication within the company homogenous.

Another reason for Six Sigma effectiveness is, like at GE, Six Sigma remains embedded in Motorola culture. The Change Agents, required when implementing Six Sigma, are composed of more than just Black Belts managers. To succeed, there must be leadership, champions, and sponsors. In other words, everyone has to "buy in," or believe, in Six Sigma. At Motorola, not only do they believe in the process, they also market the program to other companies and organizations. Motorola University is a consulting/training program that teaches others on how to implement Six Sigma. [164]

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[164] See Barney (2002, May); Caulcutt (2001); Pyzdek (1994-2004); http://www.motorola.com

Figure 2. Motorola's Success Strategy[165]
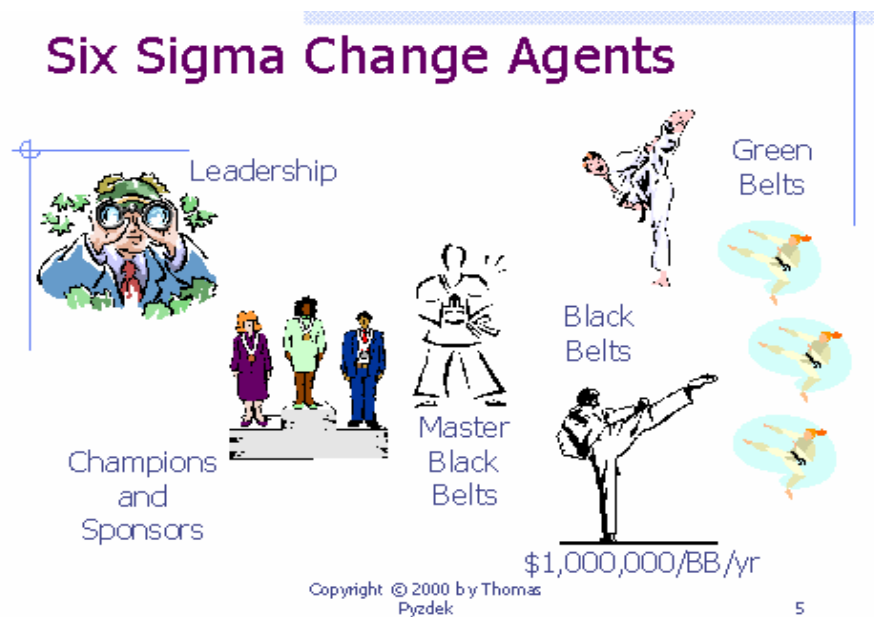
Seagram

The All-encompassing Beverage Company:

Seagram primarily sold top-shelf liquor to a loyal customer base; but, over the years, the company chose to diversify and move beyond its core industry into manufacturing and media. In the mid-1990s, Seagram reengineered the company to better manage the transition.

"The reengineering task involved hundreds of employees throughout Seagram, organized into teams to redesign and streamline key business processes," such as:

1) Business Planning
2) Management Information System
3) Finance, Customer Fulfillment
4) Marketing, and Manufacturing

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[165] http://www.qualityamerica.com/knowledgecente/articles/PYZDEKSixSigRev.htm

They also seek best practices from other companies to shift operations within Seagram from an internal focus to an external customer focus.

Moreover, culture was the hallmark of Seagram's change. CEO Edgar Bronfman, Jr., personally drafted nine values and began a nine-month corporate value-building program for all employees at Seagram. He formulated a three-prong plan:

1) A personalized communication cascade
2) A 360-degree feedback process for the senior executives
3) A training program for equipping the top 1,200 managers.

Seagram's extensive cultural change program is considered a success by the business community.

Successful Change Does Not Mean Successful Strategy:

In 2000, Bronfman merged with Vivendi and moved away from beverage to media. The estimated loss from the strategic change is around $3 billion. Recent performance improvement has redeemed Bronfman, but has not completely undone the harm of past mistakes. This demonstrates that successful change does not necessarily stem from a well-perceived strategy. A similar example is the merger between AOL and Time Warner (most criticism falling on Time Warner for agreeing to the deal).[166]

Southwest Airlines (SWA)

Mission:

Southwest Airlines clearly states its:

Dedication to the highest quality of Customer Service delivered with a sense of warmth, friendliness, individual pride, and Company Spirit. To Our Employees: We are committed to provide our Employees a stable work environment with equal opportunity for learning and personal growth. Creativity and innovation are encouraged for improving the effectiveness of Southwest Airlines. Above all,

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[166] See Jick & Peiperl (2003); The Observer Business & Media (2006, July 2); http://www.seagramsginlive.com/

Employees will be provided the same concern, respect, and caring attitude within the organization that they are expected to share externally with every Southwest Customer.

Southwest Airlines does the following to ensure that the mission infiltrates into the entire organization:

1) Invites family members of employees to all events
2) Make employees feel like they are part of a cause (helping people fly who normally could not afford to do so)
3) Place Mission within company literature
4) Instruct employees to take whatever action necessary to help customers and employees (tell employees empowering stories of good deeds)
5) Catalyze humor and heart: employees encouraged to be kooky; company has casual dress days; employees can dress up in costumes; CEO plays tricks and sings at company functions; and employees produce rap videos and perform songs and dances at company celebrations
6) Instill in employees a strong work ethic (encouraged to be flexible so they can reduce staffing requirements below their competitors)

The selection process at SWA remains rigid regarding values and attitudes. They have group interviews with jokes and role-playing to search out employees who work well in a team, have a sense of humor, and have a capacity to act spontaneously. When hired, the new employee is given a celebration greeting into the company; a senior employee is assigned as a mentor, and training includes humorous videos and skits about the company's culture of teamwork and fun. Financial and non-financial rewards are consistent with the literature. In 1999, SWA officially adopted a no-layoff policy. They also allow lateral transfers and promotions within the organization.

Southwest Airlines also articulates its mission to its suppliers. On its website, SWA tell suppliers, "A key component of providing the highest quality of customer service and a stable work environment is low fares. In order to keep our fares low, we must keep our costs low. We are, therefore, dedicated to finding ways to lower our costs and increase our productivity and quality."[167]

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[167] See Gittell, Cameron & Lim (2005); Milliman, Ferguson, Trickett & Condemi (1999); http://www.southwest.com/about_swa/

Toyota

Lean and Lean Six Sigma:

In manufacturing, no other company has the reputation of Toyota. Toyota is known as the top of the class in implementing Lean and Lean Six Sigma. Other car manufacturers have adopted Lean, but none with the same success rate as Toyota.

Toyota freely allows visits to the factory floor, but unfortunately, Toyota is one of the most difficult companies to emulate. Workers have not been able to articulate how they are able to manufacture their products so efficiency and attribute their success to the company culture of efficiency. The company invented Lean manufacturing and implemented the program successfully in the early 1980s. Lean manufacturing calls for the elimination of waste at every stage of production.[168]

United States Postal Service (USPS)

The Balanced Scorecard (BSC):

The BSC, invented by Robert Kaplan and David Norton, is a means to measure a company's performance. Unlike other measures, BSC approaches measurement from four perspectives: customer, financial, internal, and innovation and learning. "The balanced scorecard lets executives see whether they have improved in one area at the expense of another."

Postal Service Implementation of the BSC:

Before the 1990s, the USPS relied on economic growth to drive mail volume up and increase business. That assumption led to inefficiency and a lower quality of service. This inefficiency led to reform in the mid 1990s, specifically the implementation of the BSC. USPS created the Establishing Committee to tailor the program to the organization.

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[168] See Glauser (2005, April 1); Spear & Bowen (1998, September/October); http://www.toyota.com/

Three different perspectives were created:

1) Productivity measurement
2) Revenue generation measurement
3) Customer perspective

From the data collected, they created five key goals (aka, the five-point star):

1) Developing people
2) Pursuing reform
3) Managing costs
4) Growing revenue
4) Improving service

In 2004, the American Society for Quality described the USPS as "the most improved organization" since 1994.[169]

Whirlpool

Vision:

"Every Home . . . Everywhere. With Pride, Passion, and Performance. These words represent the vision that will guide Whirlpool into the future."

Challenges:

Major appliance manufacturing is very price competitive. The home appliance industry must market high-value products at an affordable price while simultaneously maintaining profitability. The problems Whirlpool experienced was due in large part to its phenomenal growth. Whirlpool grew mainly through acquisition and geographic expansion and became too complex for outdated spreadsheets and manual procedures. Whirlpool CIO, Esat Sezer, commented that, "Our supply chain was becoming a competitive disadvantage for us."

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[169] See Kaplan & Norton (2005, July/August); Mathys & Thompson (2006); http://www.usps.com/

Four Identified Strategy Goals:

1) Understand the Customer Needs
2) Identify Trade Partner Priorities
3) Benchmark the Competition
4) Build for the Future

Reforms:

IT: Whirlpool developed web-based supply-chain management operations to communicate with trading partners. To alleviate pressure on Whirlpool's IT staff, they also entered into a five year, $39 million contract with Keane Inc. to provide application support. Keane development and management consultants also provided repair and help desk support for Whirlpool's SAP R/3 ERP system, electronic data interchange, and existing call center applications. Customer satisfaction was the impetus behind hiring Keane. In 2002, Whirlpool also installed the i2 TradeMatrix Collaborative Planning, Forecasting and Replenishment (CPFR) system, a web-based collaboration tool for sharing and combining sales forecasts of Whirlpool and its major customers: Sears, Lowe's, and Best Buy. Additionally, Whirlpool turned to IBM for assistance in developing web portals for smaller customers who did not have dedicated system-to-system connectivity with Whirlpool and had to submit orders via telephone or fax.

Customer Focused: Whirlpool directly communicated with customers, seeking out their thoughts and concerns.

Selectivity: Whirlpool became selective when choosing which suppliers to partner with, and recognized the vital role suppliers played in maintaining Whirlpool's status as the world's leading home appliance manufacturer. By utilizing the best possible suppliers globally, Whirlpool endeavored to meet its customers' desires with the most competitive costs, best quality, and on-time deliveries. Whirlpool engages certain key suppliers in their customized Six Sigma methodology, known as Operational Excellence (OPEX), which strives to have participants consistently improving quality levels, lowering costs, and shortening cycle times.

Flexibility: Flexibility in its supply-chain management systems is critical for Whirlpool's survival into the future. With changing global environments and shifting

business practices, flexible and innovative software, as well as dedicated support to affect those changes, should ensure Whirlpool success.[170]

World Bank

Knowledge Management:

Knowledge management, a relatively new concept, is a management technique for building processes and structure to facilitate information sharing within a community or organization. Well-managed knowledge systems can help companies innovate, prepare for changing environments, and grow.

The World Bank is an organization known for its knowledge management system. It touts the knowledge program, reminding its clients that to succeed in the future one must have a sound understanding of the knowledge economy, which feeds on information. The Word Bank Institute is a think tank established by the bank to prepare for exactly this type of future. Additionally, World Bank created the KD4 program, which helps gather, filter, and disseminate information to various clienteles.

World Bank made sure their structure allowed for information sharing. For instance, World Bank's communities of practice, communities customized for different regions and countries, facilitate the creation, sharing, and dissemination of information. Moreover, World Bank sought to address the importance of face-to-face time. They structured their facilities to bring people together to share and generate knowledge—meaning the bank constructed mechanisms to train and advise countries on how to create knowledge and circulate that knowledge back to the bank.

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[170] See Anthes (2005, June 6); Gibson, Rutner & Monrodt (2005, November 1); Greenemeier (2001, November 19); Ireton, Radak, Strassberger, Brophy & Schultz (2006); Porter (1979); Slone (2004, October); http://www.whirlpool.com/home.jsp; http://www.penskelogistics.com/casestudies/whirlpool.html; http://www.i2.com/assets /pdf/CSS_CPG_whirlpool_css7182.pdf.

Finally, communication of these knowledge goals to employees and clients is a top priority at World Bank.[171]

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[171] See Egan (2003); Laporte (2002); http://www.worldbank.org/

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VII. Conclusion—Implications for Modeling Transformation in Sea Enterprise

This study has reviewed the recent history of business management reform in the Department of Defense and in the Department of the Navy, and we have examined the scholarly and practitioner literature on organizational change. These early chapters set the context in which to consider benchmarking for Sea Enterprise. Two observations can be drawn from these chapters. First, Sea Enterprise has embarked upon a change agenda that has antecedents in previous change initiatives. Second, it is possible to model Sea Enterprise against the main themes of change literature to observe where Sea Enterprise is conforming or not conforming to models of successful organizational change.

Subsequent chapters then examine the definitions, concepts and techniques of benchmarking. A typology of benchmarking is developed that helps to inform the ultimate question of this report—the identification of benchmarking candidates for Sea Enterprise. The final chapter identifies benchmarking candidates in the commercial sector and in government, and suggests the type of benchmarking and outstanding characteristics of each candidate.

Our conclusion is that modeling and benchmarking can help the leaders and managers of Sea Enterprise understand, promote, and advance the success of this important change initiative. Based on this work, it is possible to: (1) develop a model of successful transformation, (2) employ that model to evaluate Sea Enterprise and make recommendations in specific areas (such as in communications where N4 has recently initiated a research engagement), and (3) more closely identify benchmarking partners and determine the potential for applying their "best practices" to Sea Enterprise.

It should be possible to choose private- and public-sector organizations as potential partners, gain access and gather information to identify critical elements common to successful transformation to determine if and how these practices can be implemented in the Navy. Studying organizations that have an ongoing program of innovation may reveal models for transformation and/or best practices that lead to ongoing innovation. Ultimately,

pilot tests could be performed in some selected specific areas of transformation using an appropriately similar benchmarking partner.

Finally, we recommend that Sea Enterprise consider supporting a research program about sustaining transformation under two near-term conditions:

- First, to address the question of sustaining its change initiative through leadership transitions. Leadership change is a key facet of sustained change. Leadership change happens frequently in the DoD and in the Navy. It often appears that management reform initiatives do not survive leadership transitions, notwithstanding the success or failure of any particular reform initiative. Fortunately, the recent CNO transition has been accomplished without a redirection of management reform. Nevertheless, with national elections only two years away, a new management agenda, replacing the current "transformation" agenda will eventually emerge. Institutionalizing the principles of Sea Enterprise will be important to future leadership transitions.

- Second, to address the question of sustaining transformation in a period of reduced base budgets. If the budget top-line of DoD and the Navy is destined to decline in the near future, there will be pressure both to accelerate transformation and to abandon it to avoid costs. An understanding of this challenge and a strategy for sustainment will be needed.

Appendix A. Summary of Benchmarking Subjects, Typology and Literature

Table 6. Benchmarking Subjects, Typology and Literature

Benchmarking Category	Benchmarking Subject(s)	Benchmarking Typology (Nature of the Object of Study)	Relevant Literature
Vision *the articulation of an aspiration*	British Airway Harley-Davidson HP Southwest Airlines Whirlpool	Strategic Future	**GENERAL** Collins, C., & Porras, J. (1994). *Built to last: Successful habits of visionary companies*. New York: HarperCollins Publishers. Collins, C., & Porras, J. (1998). Building your company's vision. *Harvard Business Review on Change*, Harvard Business School Press. Lencioni, P. (2002, July). Make your values mean something. *Harvard Business Review*, RO207J, 5-9. **BA** Jick, T., & Peiperl, M. (2003). *Managing change: Case and concepts*. (2nd ed.). New York: McGraw-Hill Higher Education. **HARLEY-DAVIDSON** Baker, C., Keeler, D., Shipp, W., Sinram, M., & Schultz, B. (2005, September 23). A turnaround story: From the brink of bankruptcy to world class management. (Final Paper GE 3306, Naval Postgraduate School). Unpublished. Beaver, G. & Bronson, J. (2004). Strategic change in the face of success? Harley Davidson, Inc. *Strategic Change*, 13(4), 205-218. Fililczak, B. (1996, February). The soul of the Hog. *Training*, 33(2), 38. Handfield, R., Monczka, R., & Robert, T. (2005). *Purchasing and supply chain management*. (3rd ed.). Mason, OH: Thomson Southwestern. Hamel, G., & Prahalad, C.K. (1990). The core competence of the corporation. *The Harvard Business Review,* 68, 79-91.

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Sullivan, L. (2004). Ready to roll: Harley-Davidson's three-year effort to build closer ties to suppliers is paying off. *Information Week*, 979, 45-46.

Will, G. (2002, July 22). Hog heaven: Harley at 100. *Newsweek*, 140(4), 60.

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			Schultz, B. (2006, Spring). Whirlpool Corporation. (Final Paper GE 3306, Naval Postgraduate School). Unpublished. Porter, M. (1979). How competitive forces shape strategy. *Harvard Business Review*, 57(2), 137-145. Slone, R. (2004, October). Leading a supply chain turnaround. *Harvard Business Review*, 82(10), 114-121.
Internal Communications *strategies and techniques of internal communication (to whom, how often, what about)*	Coca Cola HP Intel Southwest Airlines	Process Strategic	**GENERAL** Government Accountability Office. (2004, January 30). Human capital: Selected agencies' experiences and lessons learned in designing training and development programs. GAO-04-291. Retrieved July 19, 2006, from http://www.gao.gov/docsearch/featured/bp_reviews.html. Government Accountability Office. (2003, March 13). Results-oriented cultures: Creating a clear linkage between individual performance and organizational success. GAO-03-488. Retrieved July 19, 2006, from http://www.gao.gov/docsearch/featured/bp_reviews.html. Government Accountability Office. (2003, April 11). Human capital: Selected agency actions to integrate human capital approaches to attain mission results. GAO-03-446. Retrieved July 19, 2006, from http://www.gao.gov/docsearch/featured/bp_reviews.html. Government Accountability Office. (2003, July 2). Results-oriented cultures: Implementation steps to assist mergers and organizational transformations. GAO 03-669. Retrieved July 19, 2006, from http://www.gao.gov/docsearch/featured/bp_reviews.html. **COCA COLA** Hansen, M., & Deimler, M. (2001, Fall). Cutting cost while improving morale using B2E. *Sloan Management Review, 96-100*. Karamally, L. (2004, July). Coke's new CEO focuses on workers. *WorkforceManagement*, 22-23. **HP** Prior-Smith, K., & Perrin, M. (2006). Ideas on motivating people, addressing complaints and training (IMPACT): An application of benchmarking. Learning best practice from Hewlett-Packard. *Business Process Re-engineering & Management Journal*, 2(1), 7-25. **INTEL** Gawer, A. (2000, February). The organization of platform leadership: An empirical investigation of Intel's

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Realignment of Enterprise Org. *reorganizing organizational structures*	FAA IBM Kmart Seagram	Process Strategic	**FAA** Dickey, B. (2006, July 15). Coming clean: The FAA goes from high risk to high profile with its financial makeover. *Government Executive*, 39-46. GAO. (2004, November 12). Air traffic control: FAA's acquisition management has improved, but policies and oversight need strengthening to help ensure result. GAO-05-23. Retrieved July 21, 2006, from http://www.gao.gov/new.items/d0523.pdf. **IBM**

			Applegate, L. (2006, January). IBM's decade of transformation: The turnaround. *Harvard Business School Case Study #9-805-130,* 23, 5. Capo, D., Steele, L., Thompson, S., & Whiting, NAS. (2006, Spring). IBM: Supply chain masters. (Final Paper GE 3306, Naval Postgraduate School). Unpublished. Garr, D. (2000). *IBM redux: Lou Gerstner and the business turnaround of thedecade*. New York: HarperCollins Publishers. Radjou, N. (2005, March 24). IBM transforms its supply chain to drive growth. *Forrester Research, Inc., Best Practices case study*, 2. **KMART** Christensen, C. (2003). *The innovator's dilemma*. New York: HarperCollins Publishers, 128-132. Labovitz, G., & Rosansky, V. (1997). *The power of alignment: How great companies stay centered and accomplish extraordinary things*. Canada, New Jersey: John Wiley and Sons, Inc. Lilo, A. (2000, July 7). "Kmart rocks on." *Home Textiles Today*, 21(46), 21-22. **SEAGRAM** Jick, T., & Peiperl, M. (2003). *Managing change: Case and concepts*. (2nd ed.). New York: McGraw-Hill Higher Education. The Observer Business & Media. (2006, July 2). Bronfman does it his way. *TheObserver*. Retrieved July 25, 2006, from http://observer.guardian.co.uk/business/story/0,,1810 495, 00.html.
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